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Appendices

Appendix 1: Ethical clearance letter

Evaluating compliance to on-package marketing restrictions by manufacturers of infant formula, follow-up formula, young child formula and complementary foods in South Africa.



UNIVERSITY of the
WESTERN CAPE



09 December 2021

Ms A Latief
Dietetics and Nutrition
Faculty of Community and Health Sciences

HSSREC Reference Number: HS21/10/9

Project Title: Evaluating compliance to on-package marketing restrictions by manufacturers of infant formula, follow-up formula, young child formula and complementary foods in South Africa.

Approval Period: 25 November 2021 – 25 November 2024

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology, and amendments to the ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report by 30 November each year for the duration of the project.

For permission to conduct research using student and/or staff data or to distribute research surveys/questionnaires please apply via:
<https://sites.google.com/uwc.ac.za/permissionresearch/home>

The permission letter must then be submitted to HSSREC for record keeping purposes.

The Committee must be informed of any serious adverse events and/or termination of the study.

A handwritten signature in black ink, appearing to read "Patricia Josias".

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

NHREC Registration Number: HSSREC-130416-049

Director: Research Development
University of the Western Cape
Private Bag X17
Bellville 7535
Republic of South Africa
Tel: +27 21 959 4111
Email: research-ethics@uwc.ac.za

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

Appendix 2: Permission letter for secondary analysis



UNIVERSITY of the
WESTERN CAPE

FACULTY OF COMMUNITY AND HEALTH SCIENCES DEPARTMENT OF DIETETICS AND NUTRITION

24 September 2021

The Chairperson
Higher Degrees Committee
Faculty of Community and Health Sciences
University of the Western Cape
Robert Sobukwe Road
BELLVILLE
7535

Dear Sir

PERMISSION TO DO SECONDARY DATA ANALYSES ON EXISTING DATA

I am the PI on the research project "Researching the obesogenic food environment, its drivers and potential policy levers in South Africa and Ghana" (BMREC 17/8/20).

Hereby I grant permission to Aneeqah Latief (student number 3371331) to use selected photographic data generated by this survey for the analyses of infant formula, follow-up formula, young child formula and complementary foods in South Africa, towards her mini-thesis for the Masters in Public Health Nutrition. She will have access to anonymized data only.

Kind regards

A handwritten signature in blue ink that reads 'Rina Swart'.

RINA SWART
Supervisor

PI: Researching the obesogenic food environment, its drivers and potential policy levers in South Africa and Ghana

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Africa
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www.uwc.com

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to action through knowledge

Appendix 3: Codebook



**Questionnaire and Action
sequence for Evaluating compliance to on-
package marketing restrictions by
manufacturers of Infant formula, Follow-up
formula, Young child formula and
Complementary foods**

**A guide to evaluate compliance of infant formula,
follow-up formula, young child formula and
complementary food manufacturers to marketing
restrictions in the R991**

**Aneeqah Latief (MPHN)
School of Public Health, University of the Western Cape**

Definitions

Terms/phrases	Definitions
Age range/ Age of introduction	The lowest age, in months or years, recommended on the label of commercial milk formula as being the appropriate age from which the product can be consumed (Pereira et al, 2016).
Address	The label of a designated product shall contain the address of the manufacturer, importer, or seller. (Regulation 991 of 2012)
Brand name	Means the trademark or name given by a manufacturer or distributor to a designated product or range of designated products and includes brand logos (Regulation 991 of 2012).
Breastmilk	Means human milk, and can be obtained by means of the infant or young child suckling on the mother's breast or by expression of milk from the breast (Regulation 991 of 2012)
Complementary food	Means any foodstuff, whether in liquid, solid or semi-solid form, given to an infant from the age of six months as part of the transitional process during which an infant learns to eat food appropriate to his or her developmental stage while continuing to breastfeed or be fed with an appropriate formula (Regulation 991 of 2012)
Cross-promotion	Cross-promotion is a form of marketing where customers of one product are targeted with the promotion of a related product. This can include packaging, branding and labelling of a product to closely resemble that of another product (Pereira et al, 2016).
Designated product	Refers to designated products in the R991 regulations, i.e.: (a) infant formula; (b) follow-up formula; (c) infant or follow-up formula for special dietary management for infants with specific medical conditions; (d) complementary food; (e) liquid milks, powdered milks, modified powdered milks or powdered drinks marketed or otherwise represented as suitable for infants or young children; (f) feeding bottles, teats and feeding cups with spouts, straws or teats; (g) and any other products marketed or represented as suitable for feeding infants and young children that the Minister may so designate by notice published in the Gazette (Regulation 991 of 2012)
Enticement	Something used to attract or to tempt someone; a lure.
Feeding bottle	Means a device with an artificial teat, which is used to feed infants or young children (Regulation 991 of 2012)
Feeding chart/table	Serves as a guide on how to prepare BMS by providing the exact amount of water (in ml) and number of scoops to use according to the age of the infant
Feeding cup	Means a cup with an artificial teat, spout or straws which is used to feed infants or young children (Regulation 991 of 2012)
Follow-up formula	Means a product formulated industrially according to the composition of which is based on the applicable Codex standard and marketed or otherwise represented as suitable for an infant from six months on or a young child (12–36 months) (Regulation 991 of 2012).

Front main panel	Means that part of the label that bears the brand or trade name of the product in greatest prominence or any other part of the label that bears the brand or trade name in equal prominence (Regulation 1055 of 2002)
Front-of-pack nutrition labelling	Front-of-pack nutrition labelling is an evidence-based nutrition intervention that is recommended by the World Health Organization and other health agencies as an effective non-communicable disease prevention strategy. The primary aim of Front-of-Pack Labels is to provide consumers with salient, readily understood nutrition information on food products to enable them to make healthier food choices, with a secondary aim being to stimulate reformulation among food producers to improve the quality of the food supply (WHO, 2019).
Gift	Means something given free of charge, and in this context, includes, but not limited to, free samples of designated products, meals and refreshments, diaries, stationery, calendars, cot tags, stickers, growth charts, prescriptions pads, tongue depressors or any item of whatever value by manufacturers, distributors, retailers and their representatives, of the designated products (Regulation 991 of 2012).
Graphic representation	Means illustrations, photographs, drawings or pictures of infants, young children, child characters, cartoons or any other forms that resemble them, human or not, such as humanized fruits, vegetables, animals and/or flowers, among others (Regulation 991 of 2012)
Growing-up Milk	Growing-up milks, ‘toddler’ milks’ or similar products intended for children aged 1–3 years, usually to replace cows’ milk, include but are not limited to drinks (either in liquid form or powder form to be reconstituted) based on cow, goat or sheep milk or originating from soy, rice, oats or almonds with or without modification of the protein composition or content and supplementation of fatty acids, micronutrients or other substances with a potential nutritional effect, such as probiotics, prebiotics or symbiotics (EFSA, 2013).
Health claim	Means any representation that states, suggests or implies that a relationship exists between a food or a constituent of a food and health, and includes, but is not limited to nutrient function claims, enhanced function claims, reduction of disease risk claims, pre-biotic and pro-biotic claims (Regulation 991 of 2012).
Humanise	To portray or endow (in the form of a graphical image on FOP) with human characteristics or attributes; make human (The free dictionary by farlex)
Human Milk Oligosaccharide	It is a bioactive ingredient naturally present in human milk (Wicin ski et al, 2020)
Incentive	An incentive is anything that motivates an action or behaviour. Incentives may be tangible, for example gifts or awards or intangible, for example, supportive or educational relationships (Thomson, Dykes, Hurley & Hoddinott).
Infant	Means a person not more than 12 months of age (Regulation 991 of 2012).
Infant formula	Means a formulated product specially manufactured in accordance with the applicable Codex standard to satisfy, by itself, the nutritional requirements of infants during the first months of life up to the introduction of appropriate complementary feeding (Regulation 991 of 2012).

Infant or follow-up formula for special dietary management for infants with specific medical conditions	Means a formulated product that complies with the latest adopted version of the Codex Standard 72-1981 titled “Standard for infant formula and formulas for special medical purposes intended for infants” (Regulation 991 of 2012)
Label	Means any tag, mark, pictorial or other descriptive matter, written, printed, stencilled, marked, embossed or impressed on, or attached to, a container of any designated product within the scope of these regulations (Regulation 991 of 2012).
Marketing	refers to promoting, distributing, selling or advertising a designated product, and includes product public relations and information services, including the use of professional service representatives, or any person acting on behalf of a manufacturer or distributor (Regulation 991 of 2012).
Medicinal claim	Means a claim which states or implies that a product has the property of treating, preventing or curing human disease (Regulation 991 of 2012).
Modified powdered milk	Means a product made of natural milk or of whole, skimmed or partially skimmed powdered milk, or a combination of these (Regulation 991 of 2012).
Non-nutritive sweetener	Food additives that impart a sweet taste to a food, including artificial non-caloric sweeteners (e.g., aspartame, sucralose, saccharin, and acesulfame potassium); natural non-caloric sweeteners (e.g., stevia); and caloric sweeteners such as polyols (e.g., sorbitol, mannitol, lactitol, and isomalt). This category does not include fruit juices, honey, or other food ingredients that can be used as a sweetener (PAHO, 2016).
Nutrition claim	Means any representation that refers to a specific nutrient or food constituent content of a particular foodstuff such as but not limited to nutrient content or comparative claim. The following do not constitute nutrition claims: (a) the mention of substances in the list of ingredients; (b) the mention of nutrients as a mandatory part of nutrition labelling; (c) quantitative or qualitative declaration of certain nutrients or ingredients on the label if required by national legislation (Regulation 991 of 2012)
Official language	Means any one of the 11 official South African languages: Afrikaans, English, Ndebele, Pedi, Sotho, Swazi, Tsonga, Tswana, Venda, Xhosa, Zulu (Regulation 991 of 2012).
Powdered drink	Means a substance intended to be added to liquid milk, powdered milk, modified powdered milk, water or other beverages (Regulation 991 of 2012).
Processed cereal-based foodstuffs for infants or young children	Processed cereal-based foods are prepared primarily from one or more milled cereals, which should constitute at least 25% of the final mixture on a dry weight basis.

	Processed cereal-based foods are intended for feeding infants as a complementary food generally from the age of 6 months onwards, taking into account infants' individual nutritional requirements, and for feeding young children as part of a progressively diversified diet, in accordance with the Global Strategy for Infant and Young Child Feeding and World Health Assembly Resolution WHA54.2 (2001) (Codex, 2006)
Young child	Means a child older than 12 months but younger than the age of 36 months (three years) (Regulation 991 of 2012).
Young child formula	Encompasses both follow-up formula and growing-up milk (GUM), and are introduced to a child's diet past the first year of age. The term "young child formula" has been recommended by the European Food Safety Authority (EFSA) because it most accurately describes the age group for which it is intended (1 to 3 years) (Kostecka, M.; Jackowska, I.; Kostecka, J, 2021).

Acronyms

CF	Complementary Food	GUM	Growing-up milk
IF	Infant formula	IYCF	Infant and Young Child Feeding
FUF	Follow-up formula	RTD	Ready-to-drink
FOP	Front-of- Pack	YCF	Young Child Formula

Legend

	Activities a user will undertake but no development is required for questionnaire.
	These sections contain variables and inputs required on a questionnaire and the data is to be entered by a user.
	Information below this belongs on one page (form) of the questionnaire and to be developed in REDCap.
	These are section headers that separate different information under each form.
	These sections explain/ describe the fields, action to be taken by user and descriptions for each sequence of events.

Questionnaire and action sequence for evaluating compliance to on-package marketing restrictions by manufacturers of infant formula, follow-up formula, young child formula and commercially available complementary foods in South Africa

Action	Description	Source/reference
<p>Obtain a list of infant and paediatric products sold in the South African retail market and observe the packaging of each product</p> <p>Evaluate each product per sub-category for compliance to on-package marketing restrictions according to the R991</p>	<p>This is a physical observation of a product's photograph(s) to identify front-of-pack labelling (in addition to all sides of the package) of Infant Formula (IF); Follow-up Formula (FUF); Young child formulas (YCF) and Complementary Foods (CF)</p> <p>Additionally, to assess and describe the on-package cross-promotion practices between IFs, FUFs, YCFs and CF</p>	<p>This refers to where the piece of information was obtained from e.g. Regulation/peer-reviewed article</p>

FORM 1 GENERAL PRODUCT INFORMATION

Variable name	Question (Action)	Description	Source
Product_ID	<p>Enter the product ID already allocated for this product on REDCap</p> <p>Example: 20220304_02_03_019 (YYYY_MM_DD_SS_PP_N)</p>	<p>This is the current product ID format for REDCap data.</p> <p>YYYY- Year MM- Month DD- Day SS- Store code PP- Photographer code N- numerical product number</p>	REDCap

Product_Name	Example: SIMILAC, ADVANCE 1, 900 G, CAN	Name includes brand, name of product, package size and unit, package type (C = carton/can).	REDCap
Product_Sub-category	Example: Infant formulas (1804)	All products entered into REDCap have been further subcategorised within a food group category. The subcategory “Infant formulas” is allocated the number 1804	Excel spreadsheet compiled by UWC (SOPH) & UNC
Product_Sub-category1	Is this product classified as a: 1 = <input type="checkbox"/> RTD Infant formula (0 – 6m) 2 = <input type="checkbox"/> Powder-based Infant formula (0 – 6m) 3 = <input type="checkbox"/> Powder-based Infant formula (0 – 12m) 4 = <input type="checkbox"/> RTD Follow-up formula (6m+) 5 = <input type="checkbox"/> Powder-based Follow-up formula (6m+) 6 = <input type="checkbox"/> RTD Young child formula (1 – 3yrs) 7 = <input type="checkbox"/> Powder-based YCF	The reason for further sub-categorisation of products is to determine if certain questions need to be answered or whether they can be skipped if a particular question does not apply to a particular product. Example: CF products do not need to answer questions in form 3 which refer to specific labelling indicators for infant formula, follow- up formula, or infant or follow-up formula for special dietary management for infants with specific medical conditions	

	<p>(1 – 3yrs)</p> <p>8 = <input type="checkbox"/> RTD milk for older children (3yrs+)</p> <p>9 = <input type="checkbox"/> Commercially available complementary food products</p> <p>10 = <input type="checkbox"/> Other</p>		
Product manufacturer/producer	<p>Enter the name of the product's manufacturer in the box provided</p> <input type="text"/>	The name of the manufacturer provides information on which company produces which brand of products and the type of products they manufacture.	REDCap
Product importer/distributor	<p>Enter the name of the importer/distributor if any stated on the product</p> <input type="text"/>	This information is important to know if paediatric food products are being imported from other countries and which brands of paediatric food products are being imported.	REDCap
Package size and unit	900 G	900: A numeric value for package weight. G: A unit of the weight measurement in grams, kilograms, litres or millilitres.	REDCap
Form_Complete	<p>Tick COMPLETE or INCOMPLETE and SAVE the form.</p> <p>Example: <input checked="" type="checkbox"/></p> <p>Complete <input type="checkbox"/></p>	General product information and marketing data will be captured on separate forms to allow for timely saving of data.	REDCap

	Incomplete			
Action		Description		
If Form 1 is complete, proceed to next section.		In the next section, general labelling information for product item entered in Form 1 will be captured.		
FORM 2				
GENERAL LABELLING REQUIREMENTS FOR ALL DESIGNATED PRODUCTS				
Variable name	Condition	Questions (Action)	Description	Source
General labelling requirement fields	Conditions for answering questions in the “Questions” column	Enter the field values onto the REDCap questionnaire for general labelling information found on product item being studied. If any of the following types of labelling sections are applicable, answer the relevant questions by ticking the appropriate box and/ or inserting comments.	These fields will capture the types of labelling information found on the product item. Questions for the labelling and types of marketing observed on packaging will be outlined in sections.	“General labelling requirements” derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Action		Description		
Study all sides of the product packaging for labelling indicators and complete the sections below. Indicate where appropriate with a tick. If required, you may add additional information under comments.		Data entry user, studies all sides of the packaging and proceeds to complete appropriate sections below.		

Variable name	Condition	Questions (Action)	Description	Source
FRONT-OF-PACK LABELLING INFORMATION				
Age	Always provide an answer unless the information is missing (then state “no age indicated”)	What is the age range (in months) displayed on the product? <input type="text"/>	Field rule: Type the age (in the provided textbox) that is displayed on the designated product (convert to months if in years)	Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Age_range	Always answer	Is the intended age range located under the name or description of the product? 1 = Yes <input type="checkbox"/> 0 = No, not indicated <input type="checkbox"/> 2 = No, indicated elsewhere <input type="checkbox"/> 3 = Not applicable <input type="checkbox"/>	Field rule: either yes or no must be selected.	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Age_range2	Only answer if the answer to the previous question was “No, indicated elsewhere”	If elsewhere, specify where the age range is located on the product? <input type="text"/>	Field rule: tick the most appropriate answer	Follow-up question

Age_intro	Always answer	<p>Does the product label specify a recommended age of introduction that is less than 6 months of age?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not a complementary food <input type="checkbox"/></p>	<p>If the recommended age of introduction is 6 months of age (180 days/the 7th-month of life) or later, the answer will be No.</p>	<p>WHA resolution 39.28 (1986); WHA resolution 49.15 (1996); Global Strategy for IYCF (WHO 2003); Quinn, et al. 2010 (Section 3.1, p. 13–14; Section 4, p. 23).</p>
Age_intro1	Always answer	<p>Does the product label include an appropriate/recommended age for use of the product that is 6 months or more?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not a complementary food <input type="checkbox"/></p>	<p>If the recommended age of introduction is before 6 months of age (180 days/the 7th-month of life). Or if no age of introduction is specified then the answer will be No.</p>	<p>WHA resolution 39.28 (1986); WHA resolution 49.15 (1996); Global Strategy for IYCF (WHO 2003); Quinn, et al. 2010 (Section 3.1, p. 13–14; Section 4, p. 23).</p>
Language_english	Always answer	<p>Is the front main panel written clearly (is the description on the front main panel easy to read and understand)?</p> <p>1 = Yes <input type="checkbox"/></p>	<p>Field rule: Either yes or no must be selected.</p>	<p>Question derived from Regulations relating to Foodstuffs for</p>

		2 = No <input type="checkbox"/>		Infants and Young Children (R991 of 2012)
Language_english1	Always answer	<p>Is the front main panel written in the English language?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Other <input type="checkbox"/></p>	Field rule: Fill in the language displayed on the front main panel	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Language_english2	Only answer if “other” was chosen in the previous question	<p>Please provide the “other language” in the text box provided below:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	Field rule: type the answer in the text box provided	Follow-up question
Statements	ONLY ANSWER IF THE PRODUCT IS A COMPLEMENTARY FOOD	<p>Does the label include the following statements?</p> <p>1 = <input type="checkbox"/> "This food is not intended for infants under 6 months of age and early introduction is not recommended"</p> <p>2 = <input type="checkbox"/> "From 6 months of age, together with breast milk, infants should be fed a variety of foods". Ask a health worker or health professional for advice"</p> <p>3 = <input type="checkbox"/> "Do not add salt and/or sugar" in close proximity to the preparation instructions in capital letters</p>	Field rule: Tick all the answers that apply	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)

		<p>4 = <input type="checkbox"/> None of the above</p> <p>5 = <input type="checkbox"/> Not applicable (i.e. not complementary food)</p> <p>6 = <input type="checkbox"/> Other similar statements</p>		
Other_similar_statements	Only answer if “Other similar statements” was selected in the previous question	<p>Provide a short description of “other similar statements” in the textbox provided below</p> <div style="border: 1px solid black; width: 100px; height: 30px; margin: 10px auto;"></div>	Field rule: type the answer in the text box provided	Follow-up question
FOP MARKETING ASPECTS OF DESIGNATED PRODUCTS				
Graphic_representation	Always answer	<p>Does the FOP label show any illustration of infant feeding AND/OR animated baby animal figure displayed on its own?</p> <p>1 = Yes <input type="checkbox"/></p> <p>0 = No <input type="checkbox"/></p>	Field rule: Either yes or no must be selected.	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Graphic_representation1	Always answer	<p>If yes, which of the following does it display:</p> <p>1 = Infant <input type="checkbox"/></p> <p>2 = Toddler <input type="checkbox"/></p> <p>3 = Young child <input type="checkbox"/></p>	Field rule: tick all the answers that apply	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)

		<p>4 = Humanized figure i.e., animated characters/animals feeding their young <input type="checkbox"/></p> <p>image of a mother figure</p> <p>5 = Images of bottles/feeding cups <input type="checkbox"/></p> <p>6 = Baby animal displayed on its own <input type="checkbox"/></p> <p>7 = Other similar imagery <input type="checkbox"/></p> <p>8 = None of the above <input type="checkbox"/></p>		
Graphic_representation2	Only answer if “other similar imagery” in the previous question was chosen	<p>If there are “Other similar imagery” please describe it in the text box provided below:</p> <div style="border: 1px solid black; height: 30px; width: 100%;"></div>	Field rule: describe the “other similar imagery” seen on the product	Follow-up question
Illustration	Only answer this question if the FOP label shows any illustration of infant feeding AND/OR animated baby animal figure displayed on its own	<p>Is this illustration part of the brand logo or is it an illustrative image?</p> <p>1 = Part of the brand logo <input type="checkbox"/></p> <p>2 = Illustrative image <input type="checkbox"/></p> <p>3 = Both <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Independently created question
Back_of_pack	Always answer	<p>Does the BACK OF PACK show any illustration of infant feeding AND/OR animated baby animal figure displayed on it’s own?</p> <p>1 = Yes <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Independently created question

		2 = No <input type="checkbox"/>		
Back_of_pack1	Only answer if yes was selected in the previous question	<p>If yes, which of the following does it display:</p> <p>1 = Infant <input type="checkbox"/></p> <p>2 = Toddler <input type="checkbox"/></p> <p>3 = Young child <input type="checkbox"/></p> <p>4 = Humanized figure i.e., animated characters/animals feeding their young/image of a mother figure <input type="checkbox"/></p> <p>5 = Images of bottles/feeding cups <input type="checkbox"/></p> <p>6 = Baby animal displayed on its own <input type="checkbox"/></p> <p>7 = Other similar imagery <input type="checkbox"/></p>	Field rule: tick all the answers that apply	Independently created question
Illustration1	Only answer if yes was selected in the back_of_pack question	<p>Is this illustration part of the brand logo or is it an illustrative image?</p> <p>1 = Part of the brand logo <input type="checkbox"/></p> <p>2 = Illustrative image <input type="checkbox"/></p> <p>3 = Both <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Independently created question
Graphic_representation3	Always answer	Are there any pictorial representation (s) on the FOP that can be misleading to consumers?	Field rule: Either yes or no should be selected.	Regulations relating to the labelling and advertising of

		<p>e.g. Rice cakes with banana (there are no bananas in the container? OR whole fruits shown on the FOP but a fruit concentrate is used)</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p>	<p>Regulation(2)(a)(iii) allow graphics of the composition or prepared product of a complementary food – but it should not be misleading or deceptive.</p>	<p>Foodstuffs. R146 Regulation 34</p>
Graphic_representation4	Only answer if yes was selected in the previous question	<p>If yes to the previous question, please describe the pictorial representation:</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	<p>Field rule: provide as much detail as possible</p>	<p>Follow-up question</p>
Ingredients_marketedon_FOP	Always answer	<p>On the FOP, is there any mention of “honey”?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p>	<p>Field rule: Either yes or no must be selected.</p>	<p>Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)</p>
Ingredients_marketedon_FOP1	Only answer this question, if the answer was yes to the previous question	<p>If yes to the previous question, is there proof on the product packaging that the “honey” is free from Botulism toxins?</p> <p>1= Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p>	<p>Field rule: Either yes or no must be selected.</p>	<p>Independently created question</p>

Ingredients_marketedon_FOP2	Always answer	<p>On the FOP, is there any mention of “maple syrup”?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p>	<p>Field rule: Either yes or no must be selected.</p>	<p>Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)</p>
Ingredients_marketedon_FOP3	Only answer this question, if the answer was yes to the previous question	<p>If yes to the previous question, is there proof on the product packaging that the “maple syrup” is free from Botulism toxins?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p>	<p>Field rule: Either yes or no must be selected.</p>	<p>Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)</p>
Formula	Only answer if the product is marketed as a GUM (1 – 3years)	<p>If the product is labelled for children over 12 months of age, does it display the word “formula” on the FOP?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p>	<p>Field rule: Either yes or no should be selected.</p>	<p>Pereira et al, 2016</p>
Common_marketing_claims	Always answer	<p>Does the label contain the following words/statements that may directly or indirectly indicate that such a product is suitable for all infants?</p> <p>1 = “First milk/first food” <input type="checkbox"/></p>	<p>Field rule: tick the most appropriate answer</p>	<p>Question derived from Regulations relating to Foodstuffs for Infants and Young Children</p>

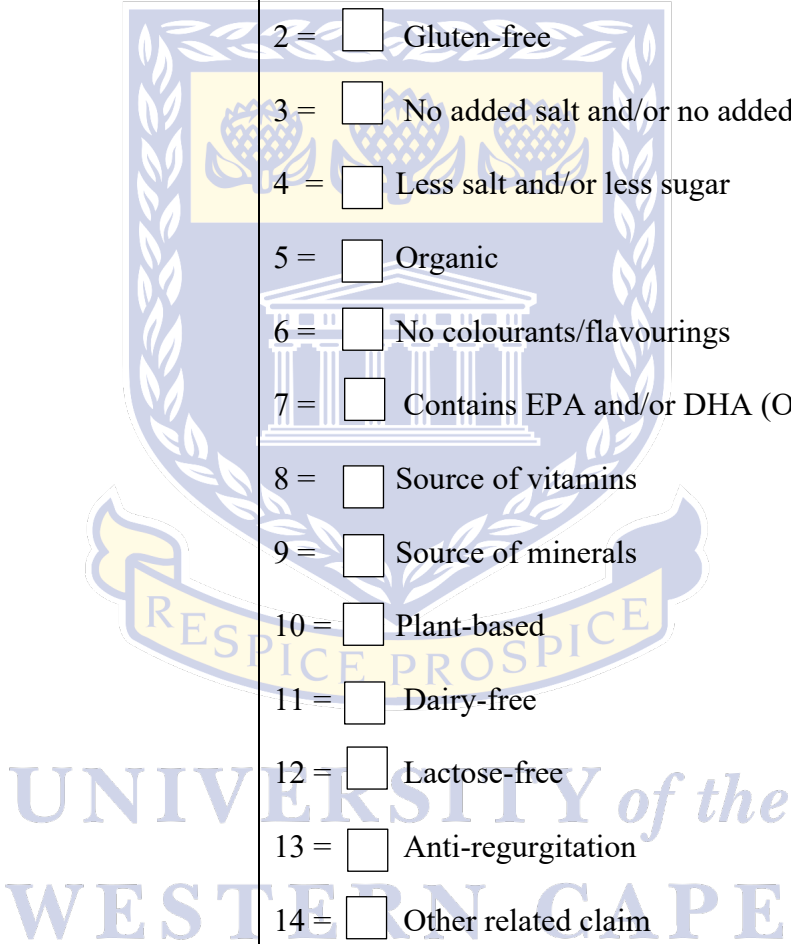
		<p>2 = “First growth” <input type="checkbox"/></p> <p>3 = “From the start” <input type="checkbox"/></p> <p>4 = “Best start in life” <input type="checkbox"/></p> <p>5 = “Similar terms or expressions” <input type="checkbox"/></p> <p>6 = None of the above <input type="checkbox"/></p>		(R991 of 2012)
Common_marketing_claims1	Only answer if no.5 is selected in the previous question	<p>If “similar terms or expressions” was selected, please specify what this is:</p> <input type="text"/>	Field rule: write out the word/statement in the textbox provided	Independently created question
Terms_phrases	Always answer	<p>Does the FOP label include the following terms or phrases?</p> <p>1 = “Maternalised” <input type="checkbox"/></p> <p>2 = “Humanised” <input type="checkbox"/></p> <p>3 = “Breast-milk substitute” <input type="checkbox"/></p> <p>4 = Any derivative form of these terms or any similar expression that may suggest a strong similarity between the product and breast milk i.e. Human milk oligosaccharide (HMO) <input type="checkbox"/></p> <p>5 = None of the above <input type="checkbox"/></p>	Field rule: tick all that apply	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)

Terms_phrases1	Only answer if no.4 of the previous question was selected	If there are any similar terms or expressions that may suggest a strong similarity between the product and breast milk on the label, give a description of this? <input type="text"/>	Field rule: Provide appropriate answer	Follow-up question
Terms_phrases2	Always answer	Are there any catchy terms/phrases on FOP that suggest the product will provide specific health benefits to the child or any word/term that makes one believe that the product is of a good quality standard (usually situated below the brand name)? 1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/>	Field rule: Either yes or no must be selected.	Independently created question
Terms_phrases3	Always answer	If yes to the above question, provide the name of the term/phrase in textbox provided (i.e. Optipro, Fortigrow, Neuropro, Gold, Comfort, Sensitive, etc) <input type="text"/>	Field rule: Provide appropriate answer	Follow-up question
Descriptive_name	Only answer this question if the answer to the previous question was yes	Is the catchy term/phrase part of the descriptive name of the product? 1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/>	Field rule: Either yes or no must be selected.	Independently created question

Incentives	Always answer	<p>Does the label display the following information?</p> <p>1 = <input type="checkbox"/> Incentives/enticements/gifts i.e. free sample of infant or follow-up formula and/or pamphlet on infant feeding</p> <p>2 = <input type="checkbox"/> Invitations i.e. free access to events for mom and baby</p> <p>3 = <input type="checkbox"/> Any other information that will lure mothers to receive rewards or incentives for formula feeding</p> <p>4 = <input type="checkbox"/> Free help/consumer lines</p> <p>5 = <input type="checkbox"/> Websites for further information</p> <p>6 = <input type="checkbox"/> Social media applications for further information</p> <p>7 = <input type="checkbox"/> None of the above</p>	Field rule: tick all that apply	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Incentives_other	Only answer if no. 3 is selected in the previous question	<p>Specify, if there is any other information that will lure mothers to receive rewards or incentives for formula feeding</p> <div data-bbox="1088 1129 1335 1206" style="border: 1px solid black; height: 48px; width: 110px; margin: 10px auto;"></div>	Field rule: provide an explanation in the textbox	Follow-up question
Tie-in sales	Always answer	<p>When purchasing a designated product, does a free sample of another designated product come with it?</p> <p>1 = Yes <input type="checkbox"/></p>	Field rule: either yes or no should be selected.	Question derived from R991

		2 = No <input type="checkbox"/>		
Tie-in sales1	Only answer if a free sample of a designated product is sold with any designated product	If yes, provide the name of the product and the manufacturer: <input type="text"/>	Field rule: Provide the answer in the textbox below	Question derived from R991
IYCF_experts	Always answer	Does the label make any claim that this specific company or brand represents itself as experts in infant and young child feeding? 1 = Yes <input type="checkbox"/> 0 = No <input type="checkbox"/>	Field rule: Either yes or no must be selected.	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
IYCF_experts1	Only answer if the answer to the previous question was “yes”	If yes, which of the following is displayed? 1 = <input type="checkbox"/> Experts in nutrition 2 = <input type="checkbox"/> No.1 brand in the industry 3 = <input type="checkbox"/> Other similar claims	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Other_similar_claims	Only answer if no.3 was selected in the previous question	If other similar claims are stated, please describe this in the textbox provided <input type="text"/>	Field rule: Provide the answer in the textbox below	Follow-up question
CLAIMS				
Health_claim	Always answer	Which of the following health claims does the product display?	Field rule: tick all that apply	Question derived from

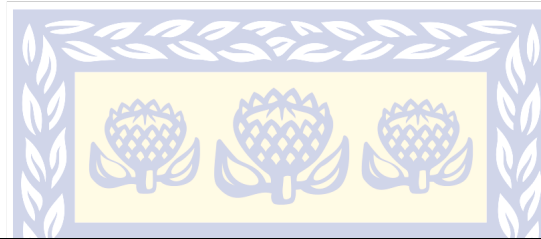
		<p>1 = <input type="checkbox"/> No preservatives/preservative free</p> <p>2 = <input type="checkbox"/> Gluten-free</p> <p>3 = <input type="checkbox"/> No added salt and/or no added sugar</p> <p>4 = <input type="checkbox"/> Less salt and/or less sugar</p> <p>5 = <input type="checkbox"/> Organic</p> <p>6 = <input type="checkbox"/> No colourants/flavourings</p> <p>7 = <input type="checkbox"/> Contains EPA and/or DHA (Omega 3)</p> <p>8 = <input type="checkbox"/> Source of vitamins</p> <p>9 = <input type="checkbox"/> Source of minerals</p> <p>10 = <input type="checkbox"/> Plant-based</p> <p>11 = <input type="checkbox"/> Dairy-free</p> <p>12 = <input type="checkbox"/> Lactose-free</p> <p>13 = <input type="checkbox"/> Anti-regurgitation</p> <p>14 = <input type="checkbox"/> Other related claim</p> <p>15 = <input type="checkbox"/> None of the above</p>		<p>Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)</p>
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Other_claim	Only answer this question if “other related claim” was ticked in the previous question	Specify “other related claim” if any: <input type="text"/>	Field rule: provide the claim displayed on the package if any, in the text box provided	Follow-up question
Negative_claim	Always answer	Does the label contain any of the following information or make any negative claim relating to the nutritional content of breastmilk? 1 = <input type="checkbox"/> Breast milk contains insufficient antibodies for babies 2 = <input type="checkbox"/> Breast milk does not contain enough vitamins (specifically vitamin D) & minerals 3 = <input type="checkbox"/> Other negative claims on the label relating to the nutritional content of breastmilk 4 = <input type="checkbox"/> None of the above	Field rule: tick all answers that apply	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Negative_claim1	Only answer this question if the answer to the previous question was “other negative claim”	If “other negative claim” was answered to the previous question, provide the claim that is displayed. <input type="text"/>	Field rule: provide the answer in the text box below	Follow-up question
Form_Complete	Tick COMPLETE or INCOMPLETE and SAVE the form. Example:		Front-of pack, back of pack, side of pack labelling and marketing	

Complete

Incomplete



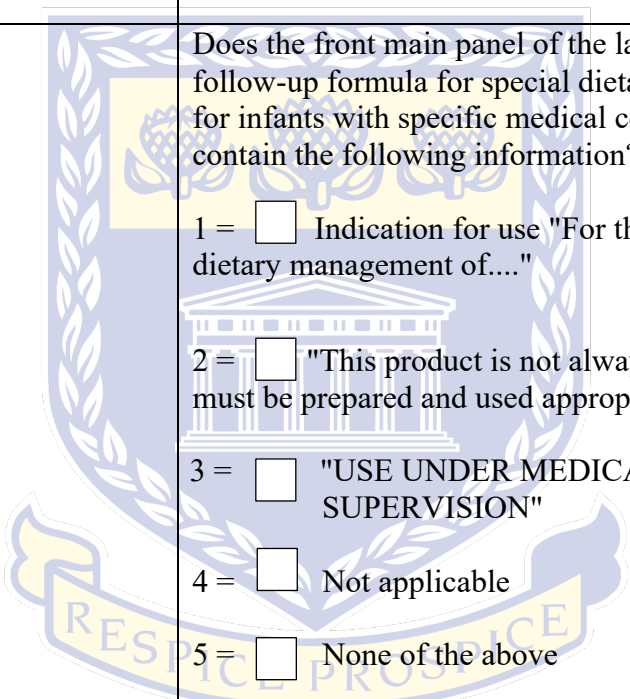
information for all applicable sections are completed.

Tick to validate and then SAVE form.

FORM 3

SPECIFIC LABELLING REQUIREMENTS FOR ALL INFANT, FOLLOW UP FORMULAS & YOUNG CHILD FORMULAS

Variable name	Condition	Questions (Action)	Description	Source
FRONT-OF-PACK LABELLING INFORMATION				
Formula1	Always answer	Which paediatric food subcategory does this designated product belong to? 1 = <input type="checkbox"/> Infant formula (0 -6 months) 2 = <input type="checkbox"/> Follow-up formula (6 months+) 3 = <input type="checkbox"/> Young child formula (1-3yrs) 4 = <input type="checkbox"/> Commercially available complementary foods 5 = <input type="checkbox"/> None of the above	Field rule: tick the most appropriate answer	Follow-up question
Special_dietary_management	Always answer	Is this designated product a special dietary management infant or follow up formula for specific medical conditions?	Field rule: tick the most appropriate answer	Follow-up question

		1 = Yes <input type="checkbox"/> 0 = No <input type="checkbox"/>		
Important_info	Always answer	 <p>Does the front main panel of the label of infant or follow-up formula for special dietary management for infants with specific medical conditions contain the following information?</p> <p>1 = <input type="checkbox"/> Indication for use "For the dietary management of..."</p> <p>2 = <input type="checkbox"/> "This product is not always sterile. It must be prepared and used appropriately"</p> <p>3 = <input type="checkbox"/> "USE UNDER MEDICAL SUPERVISION"</p> <p>4 = <input type="checkbox"/> Not applicable</p> <p>5 = <input type="checkbox"/> None of the above</p>	Field rule: tick the appropriate answer/s	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Prep_instructions	Always answer	<p>Does the label indicate preparation instructions in the English language?</p> <p>1 = Yes <input type="checkbox"/></p> <p>0 = No <input type="checkbox"/></p>	Field rule: either yes or no must be selected.	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)

Language	Always answer	Does the label indicate preparation instructions in more than one language? 1 = Yes <input type="checkbox"/> 0 = No <input type="checkbox"/>	Field rule: either yes or no must be selected.	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Official_Languages	Only answer if the answer to the previous question is “yes”	If yes, in what other official languages are the instructions illustrated in? 1 = <input type="checkbox"/> Afrikaans 2 = <input type="checkbox"/> isiNdebele 3 = <input type="checkbox"/> isiXhosa 4 = <input type="checkbox"/> isiZulu 5 = <input type="checkbox"/> Sepedi 6 = <input type="checkbox"/> Sesotho 7 = <input type="checkbox"/> Setswana 8 = <input type="checkbox"/> siSwati 9 = <input type="checkbox"/> Tshivenda 10 = <input type="checkbox"/> Xitsonga	Field rule: tick the appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)

Prep_instructions1	Always answer	Does the label repeat the preparation instructions in at least five other official languages? 1 = Yes <input type="checkbox"/> 0 = No <input type="checkbox"/>	Field rule: either yes or no must be selected.	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
African_languages	Always answer	Is there a message anywhere on the label stating that there is an enclosed leaflet with preparation instructions in other African languages? 1 = Yes <input type="checkbox"/> 0 = No <input type="checkbox"/>	Field rule: either yes or no must be selected.	Independently created question
Clear_messages	Always answer	Which of the following messages are displayed on the container? 1 = <input type="checkbox"/> "Does not contain breastmilk" 2 = <input type="checkbox"/> "Breastmilk is the best food for babies" 3 = <input type="checkbox"/> None of the above	Field rule: Tick all the answers that apply	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Clear_messages1	Always answer	Where on the container are the above messages displayed? 1 = <input type="checkbox"/> Top of front main panel	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for

		2 = <input type="checkbox"/> Bottom of front main panel 3 = <input type="checkbox"/> Elsewhere on container 4 = <input type="checkbox"/> Not applicable		Infants and Young Children (R991 of 2012)
Displayed_everywhere	Only answer if no.3 was selected for the previous question	If the above messages are displayed elsewhere on the container, describe where they are located on the label (be specific). <input type="text"/>	Field rule: Provide the answer in the textbox below	Follow-up question
Clear_messages2	Always answer	Are the messages above in bold letters that are clear, conspicuous and easy to read? 1 = <input type="checkbox"/> Yes 2 = <input type="checkbox"/> No 3 = <input type="checkbox"/> Not applicable	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Clear_messages3		Explain why the messages above are not clear, conspicuous and easy to read? (i.e. are the text small or do they fade into the background?) <input type="text"/>	Field rule: Provide the answer in the textbox below	Follow-up question
Clear_messages4	Always answer	Does the label contain the following messages? 1 = <input type="checkbox"/> "This product shall only be used on the advice of a health professional"	Field rule: Tick all the answers that apply	Question derived from Regulations relating to

		<p>2 = <input type="checkbox"/> “This product is not always sterile. It must be prepared and used appropriately”.</p> <p>3 = <input type="checkbox"/> None of the above</p>		Foodstuffs for Infants and Young Children (R991 of 2012)
Msgs_located	Always answer	<p>Where are the above messages located on the label?</p> <p>1 = <input type="checkbox"/> Bottom of the container/label (on the front-of-pack)</p> <p>2 = <input type="checkbox"/> Top of the container/label (on the front-of-pack)</p> <p>3 = <input type="checkbox"/> Elsewhere on the container</p> <p>4 = <input type="checkbox"/> Not applicable</p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Clear_messages5	Only answer if no.3 was selected above	<p>If any of the messages above are indicated elsewhere on the container, please explain where on the container they are indicated?</p> <div style="border: 1px solid black; height: 30px; width: 100%; margin-top: 10px;"></div>	Field rule: Provide the answer in the textbox below	Follow-up question
Health_messages	Always answer	<p>Does the label contain at least one of the following health messages which is visible, clear and conspicuous?</p> <p>1 = <input type="checkbox"/> Infant formula increases an infant's risk of allergy</p>	Field rule: tick all the answers that apply	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)

		<p>2 = <input type="checkbox"/> Infant formula increases an infant's risk of ear infections</p> <p>3 = <input type="checkbox"/> Infant formula increases an infant's risk of acute respiratory disease</p> <p>4 = <input type="checkbox"/> Infant formula increases an infant's risk of gastrointestinal infections</p> <p>5 = <input type="checkbox"/> None of the above</p>		
Health_messages1	Always answer	<p>Are the health message(s) selected above, visible, legible, clear and conspicuous on the label?</p> <p>1 = <input type="checkbox"/> Yes</p> <p>2 = <input type="checkbox"/> No</p> <p>3 = <input type="checkbox"/> Not applicable</p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Health_messages2	Only answer if “No” was selected above	<p>Explain why the health messages are not visible, clear, legible, conspicuous or all of the above?</p> <div style="border: 1px solid black; height: 30px; width: 100%; margin-top: 10px;"></div>	Field rule: Provide the answer in the textbox below	Follow-up question
PREPARATION INSTRUCTIONS FOR INFANT FORMULA/FOLLOW-UP FORMULA, LIQUID MILKS, POWDERED MILKS, MODIFIED POWDERED MILKS, POWDERED DRINKS AND COMPLEMENTARY FOODS				
Prep_instructions2	Always answer	<p>Does the label show an illustration of how to prepare formula milk safely?</p> <p>1 = Yes <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for

		2 = No <input type="checkbox"/> 3 = Not applicable <input type="checkbox"/>		Infants and Young Children (R991 of 2012)
Prep_comp_foods	Always answer	Does the label of the (complementary food) provide instructions for safe and appropriate preparation where applicable? 1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 3 = Not applicable (heat and eat) <input type="checkbox"/>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Nb_notice_compfood	Always answer	Does the label of the (complementary food) include a warning preceded by the expression “Important notice” against the health hazards of unsafe and inappropriate preparation? 1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 3 = Does include a warning message but not preceded by the expression “Important notice” <input type="checkbox"/>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Nb_notice_compfood1	Always answer	Does the label of the (complementary food) include a warning preceded by the expression “Important notice” against the health hazards of unsafe and inappropriate storage? 1 = Yes <input type="checkbox"/>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children

		<p>2 = No <input type="checkbox"/></p> <p>3 = Does include a warning message but not preceded by the expression “Important notice” <input type="checkbox"/></p> <p>4 = Not applicable <input type="checkbox"/></p>		(R991 of 2012)
Sterilisation	Only answer if the product is in powder form	<p>Does the label show an illustration of the sterilisation of equipment and utensils?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Prep_instructions_illustration	Only answer if the product is in powder form	<p>Does the label depict the preparation instructions in a clear step by step manner?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Prep_instructions_illustration1	Always answer	<p>Does the label depict the preparation instructions by using the following graphics:</p> <p>1 = <input type="checkbox"/> Feeding bottle with teat</p> <p>2 = <input type="checkbox"/> Feeding cup with spout</p>	Field rule: Tick the answer that applies	Question derived from Regulations relating to Foodstuffs for Infants and Young Children

		<p>3 = <input type="checkbox"/> Feeding without spout</p> <p>4 = <input type="checkbox"/> Ordinary cup</p> <p>5 = <input type="checkbox"/> Other graphic representation</p> <p>6 = <input type="checkbox"/> None of the above</p>		(R991 of 2012)
Prep_instructions_illustration2	Only answer this question, if no.5 of the previous question was selected	<p>Define “Other graphic representation” in the textbox provided:</p> <div style="border: 1px solid black; width: 100px; height: 30px; margin: 10px auto;"></div>	Field rule: Provide the answer in the textbox below	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Prep_instructions3	Only answer if the product is in powder form	<p>Does the label indicate (in words) that safe drinkable, previously boiled water should be used?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Prep_instructions4	Only answer if the product is in powder form	<p>Does the label indicate that only the enclosed scoop should be used?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for

		3 = Not applicable <input type="checkbox"/>		Infants and Young Children (R991 of 2012)
Feeding_chart	Only answer if the product is in powder form	Does the label display the feeding chart? 1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 3 = Not applicable <input type="checkbox"/>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Age_indication	Only answer if the product is in powder form	Does the feeding chart correspond with the age range indicated on the front-of-pack? 1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 3 = Not applicable <input type="checkbox"/>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Feeding_chart2	Only answer if the product is in powder form	Does the label display instruction for discarding left over feed? 1 = Yes <input type="checkbox"/> 2 = No <input type="checkbox"/> 3 = Not applicable <input type="checkbox"/>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)

Feeding_chart3	Only answer if the product is in powder form	<p>Does the label indicate that only one feed should be prepared at a time?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Storage	Only answer if the product is in powder form	<p>Does the label provide instructions for safe storage BEFORE the container has been opened?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Storage1	Only answer if the product is in powder form	<p>Does the label provide instructions for safe storage AFTER the container has been opened?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Health_hazards	Always answer	<p>Does the label warn against unsafe preparation, use and storage of the designated product?</p> <p>1 = Unsafe preparation of designated product <input type="checkbox"/></p> <p>2 = Unsafe use of designated product <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for

		<p>3 = Unsafe storage of designated product <input type="checkbox"/></p> <p>4 = All of the above <input type="checkbox"/></p> <p>5 = None of the above <input type="checkbox"/></p>		Infants and Young Children (R991 of 2012)
Nb_notice	Always answer	<p>Is the warning message preceded by the expression “important notice”?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Warning_msg_located		<p>Where is this warning message indicated on the container (be specific)?</p> <p><input type="text"/></p>	Field rule: Provide the answer in the textbox below	Question derived from Regulations relating to Foodstuffs for Infants and Young Children (R991 of 2012)
Fade_background	Always answer	<p>Does the warning message match the background/fade into the background?</p> <p>1 = Yes <input type="checkbox"/></p> <p>2 = No <input type="checkbox"/></p> <p>3 = Not applicable <input type="checkbox"/></p>	Field rule: tick the most appropriate answer	Independently created question

Form_Complete

Tick COMPLETE or INCOMPLETE and SAVE the form.

Complete

Incomplete

Front-of pack labelling and preparation information for all applicable sections are completed. Tick to validate and then SAVE form.



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Appendix 3.1: Data extraction tool evaluating cross-promotion

DATA EXTRACTION TOOL FOR CROSS-PROMOTION STRATEGIES AMONG DESIGNATED PRODUCTS

Variable name	Condition	Questions (Action)	Description	Source
GENERAL PRODUCT INFORMATION				
Product_ID1	Enter the product ID already allocated for this product on REDCap Example: 20220304_02_03_019 (YYYY_MM_DD_SS_PP_N)	Product ID #1: <input type="text"/>	Field rule: enter the product ID exactly as it is from the dataset	REDCap
Product_ID2	Always answer	Product ID #2: <input type="text"/>	Field rule: Always enter the product ID exactly as it is from the dataset	REDCap
Product_ID3	Only answer if a there is a third product to compare	Product ID #3: <input type="text"/>	Field rule: Only enter the product ID if it is available (otherwise leave blank)	REDCap
Product_ID4	Only answer if a there is a fourth product to compare	Product ID #4: <input type="text"/>	Field rule: Only enter the product ID if it is available (otherwise leave blank)	REDCap

Product_ID5	Only answer if a there is a fifth product to compare	Product ID #5: <input type="text"/>	Field rule: Only enter the product ID if it is available (otherwise leave blank)	REDCap
Product_1	Always answer	Product name #1: <input type="text"/>	Field rule: The name of the product includes the brand, name of product as it is stated on the package and the package size and unit	Photos on SharePoint
Subcategory	Always answer	Which paediatric food subcategory does the above product belong to? 0 = RTD Infant formula (0 – 6 m) <input type="checkbox"/> 1 = Powder-based infant formula (0 – 6 m) <input type="checkbox"/> 2 = RTD Follow-up formula (6m+) <input type="checkbox"/> 3 = Powder-based follow-up formula (6m+) <input type="checkbox"/> 4 = RTD Young child formula (1 – 3 yrs) <input type="checkbox"/> 5 = Powder-based young child formula (1 – 3 yrs) <input type="checkbox"/>	Field rule: choose the most appropriate answer	REDCap Dataset

		6 = Cereals <input type="checkbox"/> 7 = Purees <input type="checkbox"/> 8 = Paediatric juices <input type="checkbox"/>		
Product_2	Always answer	Product name #2: <input type="text"/>	Field rule: The name of the product includes the brand, name of product as it is stated on the package and the package size and unit	Photos on SharePoint
Subcategory1	Always answer	Which paediatric food subcategory does the above product belong to? 0 = RTD Infant formula (0 – 6 m) <input type="checkbox"/> 1 = Powder-based infant formula (0 – 6 m) <input type="checkbox"/> 2 = RTD Follow-up formula (6m+) <input type="checkbox"/> 3 = Powder-based follow-up formula (6m+) <input type="checkbox"/> 4 = RTD Young child formula (1 – 3 yrs) <input type="checkbox"/> 5 = Powder-based young child formula <input type="checkbox"/>	Field rule: choose the most appropriate answer	REDCap Dataset

		<p>(1 – 3 yrs)</p> <p>6 = Cereals <input type="checkbox"/></p> <p>7 = Purees <input type="checkbox"/></p> <p>8 = Paediatric juices <input type="checkbox"/></p>		
Product_3	Only answer if there is a third product to compare	<p>Product name #3:</p> <p><input type="text"/></p>	Field rule: The name of the product includes the brand, name of product as it is stated on the package and the package size and unit	Photos on SharePoint
Subcategory2	Only answer if there is a third product to compare	<p>Which paediatric food subcategory does the above product belong to?</p> <p>0 = RTD Infant formula (0 – 6 m) <input type="checkbox"/></p> <p>1 = Powder-based infant formula (0 – 6 m) <input type="checkbox"/></p> <p>2 = RTD Follow-up formula (6m+) <input type="checkbox"/></p> <p>3 = Powder-based follow-up formula (6m+) <input type="checkbox"/></p> <p>4 = RTD Young child formula (1 – 3 yrs) <input type="checkbox"/></p>	Field rule: choose the most appropriate answer	REDCap Dataset

		<p>5 = Powder-based young child formula <input type="checkbox"/> (1 – 3 yrs)</p> <p>6 = Cereals <input type="checkbox"/></p> <p>7 = Purees <input type="checkbox"/></p> <p>8 = Paediatric juices <input type="checkbox"/></p>		
Product_4	Only answer if there is a fourth product to compare	<p>Product name #4:</p> <p><input type="text"/></p>	Field rule: The name of the product includes the brand, name of product as it is stated on the package and the package size and unit	Photos on SharePoint
Product_5	Only answer if there is a fifth product to compare	<p>Product name #5:</p> <p><input type="text"/></p>	Field rule: The name of the product includes the brand, name of product as it is stated on the package and the package size and unit	Photos on SharePoint

N_manufacturer	Only answer if the manufacturer is mentioned on the product	What is the name of the manufacturer? <input type="text"/>	Field rule: The name of the manufacturer is usually at the back of the pack	Photos on SharePoint
Brand_name	Always answer	What is the brand name of the product range? <input type="text"/>	Field rule: provide the brand name as stated on the FOP	Photos on SharePoint
DESCRIPTION OF CROSS-PROMOTION STRATEGIES OF DESIGNATED PRODUCTS				
Labelling_aspects	Only answer if the manufacturer produces both commercial milk formula and commercially available complementary foods	In the case of manufacturers that produce both commercial milk formula and complementary foods, are the products labelled in a way that also promotes the company's infant or follow-up formula by using similar or the same of the following elements as used for their infant or follow-up formula brands? 0 = Similar colour schemes between IF & FUF/YCF <input type="checkbox"/> 1 = Similar colour schemes between FUF/YCF & CF <input type="checkbox"/> 2 = Similar colour schemes between all products <input type="checkbox"/> 3 = Same colour schemes/design between IF & FUF/YCF <input type="checkbox"/> 4 = Same colour schemes/design between FUF/YCF & CF <input type="checkbox"/> 5 = Same colour schemes/design between all products <input type="checkbox"/>	Field rule: tick all that apply	Sweet et al, 2016

- | | | | | |
|--|--|---|--|--|
| | | <p>6= Similar slogan, logo, brand mascot between IF & FUF/YCF <input type="checkbox"/></p> <p>7= Similar slogan, logo, brand mascot between FUF/YCF & CF <input type="checkbox"/></p> <p>8= Similar slogan, logo, brand mascot between all products <input type="checkbox"/></p> <p>9 = Same slogan, logo, brand mascot between IF & FUF/YCF <input type="checkbox"/></p> <p>10= Same slogan, logo, brand mascot between FUF/YCF & CF <input type="checkbox"/></p> <p>11 = Same slogan, logo, brand mascot between all products <input type="checkbox"/></p> <p>12= Similar numbering/age of introduction (i.e. 1, 2, 3) between IF & FUF/YCF <input type="checkbox"/></p> <p>13 = Similar numbering/age of introduction (i.e. 1, 2, 3) between FUF/YCF & CF <input type="checkbox"/></p> <p>14= Similar numbering/age of introduction (i.e. 1, 2, 3) between all products <input type="checkbox"/></p> <p>15 = Same numbering/age of introduction (i.e.1, 2, 2) between IF & FUF/YCF <input type="checkbox"/></p> <p>16 = Same numbering/age of introduction (i.e.1, 2, 2) between FUF/YCF & CF <input type="checkbox"/></p> <p>17 = Same numbering/age of introduction (i.e.1, 2, 2) between all products <input type="checkbox"/></p> <p>18 = No similarities <input type="checkbox"/></p> | | |
|--|--|---|--|--|

Slogan	Only answer if the product(s) displays a slogan on the FOP	Provide a description of the slogan and brand mascot if any: <input type="text"/>	Field rule: provide as much detail when describing the slogan/brand mascot	Independently created question
Labelling_aspects1	Only answer if there are similar or the same label elements between the products being compared	If there are similar or the same label elements between the products, what are the main differences, if any? 0 = Numbering/age of introduction (i.e. 1, 2, 3) <input type="checkbox"/> 1 = Different colour scheme/design <input type="checkbox"/> 2 = Different brand mascot <input type="checkbox"/> 3 = Different descriptive names <input type="checkbox"/> 4 = Specify, other <input type="checkbox"/> 5 = No differences <input type="checkbox"/>	Field rule: tick all that apply	Independently created question
Differences	Only answer if “Specify, other” was chosen above	Specify if there are any other differences between the products not mentioned above: <input type="text"/>	Field rule: Provide as much detail when describing the other differences	Follow-up question
Labelling_aspects2	Always answer	In the case of manufacturers that produce both commercial milk formula and complementary foods, is there an invitation on the label (on either of the products) to make contact (direct or indirect) with the company's marketing personnel?	Field rule: tick either yes or no	Sweet et al, 2016

		1 = Yes <input type="checkbox"/> 0 = No <input type="checkbox"/>		
Labelling_aspects3	Only answer if there was an invitation on the product(s)	Provide a description of the invitation mentioned above: <input type="text"/>	Field rule: provide as much detail when describing the invitation	Independently created question
Invitation	Only answer if there was an invitation on the product(s)	Select the type of product the invitation was found on: 0 = Infant formula (0 – 6m) <input type="checkbox"/> 1 = Follow-up formula (6m+) <input type="checkbox"/> 2 = Young child formula (1 – 3 yrs) <input type="checkbox"/> 3 = Paediatric juices <input type="checkbox"/> 4 = Cereals <input type="checkbox"/> 5 = Purees <input type="checkbox"/>	Field rule: tick the most appropriate answer	Independently created question
Form_Complete	Tick COMPLETE or INCOMPLETE and SAVE the form. Complete <input type="checkbox"/> ✓ Incomplete <input type="checkbox"/>	Cross-promotion information for all applicable sections are completed. Tick to validate and then SAVE form.		

Appendix 4: WHO Nutrient and Promotion Profile Model



NUTRIENT AND PROMOTION PROFILE MODEL

Supporting appropriate promotion
of food products for infants and
young children 6–36 months
in the WHO European Region

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Appendix 5: A summary of the questions in the marketing evaluation tool and the corresponding sub-regulation it applies to

SUB-REGULATION AS DISPLAYED IN R991	QUESTION IN CODEBOOK
The front panel of any infant or follow-up formula shall contain the age range of the infants or young children for which such product is suitable, under the name or description of the product (excluded the dimensions part of the statement)	Age range (in months) displayed on the product and whether or not it is displayed under the name or description of the product
Sub-regulation 3 (1) (ii)(iii) were divided into 2 questions	The front main panel is written clearly
Sub-regulation 3 (i) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR ALL INFANT, FOLLOW UP FORMULAS & YOUNG CHILD FORMULAS	Is the front main panel written in the English language
Sub-regulation 4 (1) (e),(f) & (g) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR COMPLEMENTARY FOODS AND LIQUID MILKS, POWDERED MILKS, MODIFIED POWDERED MILKS, AND POWDERED DRINKS MARKETED OR OTHERWISE REPRESENTED AS SUITABLE FOR INFANTS AND YOUNG CHILDREN	The three mandatory complementary food statements
Sub-regulation 2 (a) under GENERAL LABELLING MATTERS OF DESIGNATED PRODUCTS: The container and/or label of a product referred to in sub-regulation (1) shall not show graphic representation, apart from those necessary to show the correct method of preparing and using the product & Sub-regulation 3 under GENERAL LABELLING MATTERS OF DESIGNATED PRODUCTS: The company logo, brand name, and logos indicating endorsement by specific religious certifying organisations shall be permitted, provided they do not contain a picture of an infant, young child or other humanized figure.	Illustration of infant feeding AND/OR animated baby animal figure displayed on its own on FOP
Sub-regulation 2 (15) under GENERAL LABELLING MATTERS OF DESIGNATED PRODUCTS: Addition of honey or maple syrup as a component in a foodstuff for infants older than 6 months or young children will be permitted provided that such honey/maple syrup complies to applicable regulations published under the Act and there is recorded proof that the honey/maple syrup is free from Botulism toxins	Mention of honey and/or maple syrup on FOP
Sub-regulation 2 (c): The container and/or label of a product referred to in sub-regulation (1) shall not	Words/statements that may directly or indirectly indicate that such a product is suitable for all infants on label

contain words that may, directly or indirectly, indicate that such a product is suitable for all infants	
Sub-regulation 4 under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS: The container or label of any infant and follow-up formula or infant and follow-up formula for special dietary management for infants shall not include, in the brand name or any other phrases the terms “maternalised”, “humanized”, or any derivative form of these terms, or any similar expression that may suggest a strong similarity between the product and breastmilk	FOP label include the following terms or phrases: <ul style="list-style-type: none"> • ‘Maternalised’ • ‘Humanised’ • ‘Breast-milk substitute’
No incentives, enticements or invitations of any nature...shall be used on the label or in the marketing of a designated products for infants or young children	Display of incentives, enticements, invitations displayed on products
Sub-regulation 13 under GENERAL LABELLING MATTERS OF DESIGNATED PRODUCTS: No toys or any other form of gifts or tokens may be referred to, inserted or sold with the designated products referred to in sub-regulation 2 (1), excluding measuring spoons and scoops	Free sample of another designated product received when purchasing a designated product
Sub-regulation 18 under GENERAL LABELLING MATTERS OF DESIGNATED PRODUCTS: No statement or claim shall be made on the label or in any other manner, which conveys a message that a specific company name or logo or brand represents itself as the experts with regard to infant and young child feeding or nutrition	Any claim on the label that a specific company or brand represents itself as experts in IYCF
Sub-regulation 4 (a)(i) under GENERAL LABELLING MATTERS OF DESIGNATED PRODUCTS: No health, medicinal or nutrition claims shall be permitted in any manner for any designated product	Examples of different health/nutrition claims displayed on designated products
Sub-regulation 2 (b) under GENERAL LABELLING MATTERS OF DESIGNATED PRODUCTS: The container and/or label of a product referred to in sub-regulation (1) shall not contain any information or make any negative claim relating to the nutritional content or other properties of human milk	Negative claim relating to the nutritional content of breastmilk
Sub-regulation 2 (a) (i), (iv), (v) under SPECIFIC LABELLING AND OTHER REQUIREMENTS	The front main panel of IF or FUF for special dietary management for infants with specific

<p>FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS</p>	<p>medical conditions should contain the following statements:</p> <ul style="list-style-type: none"> • Indication for use "For the dietary management of..." • "This product is not always sterile. It must be prepared and used appropriately" • "USE UNDER MEDICAL SUPERVISION"
<p>Sub-regulation 3(3) (i) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS</p>	<p>Preparation instructions in the English language provided that the requirements of paragraph 3(a) – (h) should be repeated in at least five other official languages</p>
<p>Sub-regulation 3 (h) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS</p>	<p>An enclosed leaflet/package insert on the label with preparation instructions in other African languages</p>
<p>Sub-regulation 3 (1)(a)(ii) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS</p>	<p>The front main panel shall contain in bold letters clear, conspicuous and easily readable messages which shall be at the top of the front main panel of the label:</p> <p>(a) ‘Does not contain breastmilk’ (b) ‘Breastmilk is the best food for babies’</p>
<p>Sub-regulation 3 (1)(a)(iii) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS</p>	<p>The front main panel shall contain in bold letters clear, conspicuous and easily readable messages which shall be at the bottom of the front main panel of the label:</p> <p>(a) ‘This product shall only be used on the advice of a health professional’; and (b) ‘This product is not always sterile and may contain harmful microorganisms. It must be prepared and used appropriately’.</p>
<p>Sub-regulation 7 under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS</p>	<p>Containers and/or labels of infant formula and infant formula for special dietary management of infants with specific medical conditions must contain at least one of the health messages set out in annexure D:</p> <ol style="list-style-type: none"> 1. Infant formula increases an infant's risk of allergy 2. Infant formula increases an infant's risk of ear infections 3. Infant formula increases an infant's risk of acute respiratory disease

	4. Infant formula increases an infant's risk of gastrointestinal infections
Sub-regulation 3 (a) – (h) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR INFANT FORMULA, FOLLOW-UP FORMULA, OR INFANT OR FOLLOW-UP FORMULA FOR SPECIAL DIETARY MANAGEMENT FOR INFANTS WITH SPECIFIC MEDICAL CONDITIONS	The container or label of any infant and follow-up formula shall provide instructions for proper sterilisation of equipment and utensils and instructions for appropriate preparation and use according to the latest FAO/WHO guidelines, Safe Preparation, Storage and Handling of Powdered Infant Formula Guidelines
Sub-regulation 4 (1) (d) under SPECIFIC LABELLING AND OTHER REQUIREMENTS FOR COMPLEMENTARY FOODS AND LIQUID MILKS, POWDERED MILKS, MODIFIED POWDERED MILKS, AND POWDERED DRINKS MARKETED OR OTHERWISE REPRESENTED AS SUITABLE FOR INFANTS AND YOUNG CHILDREN	The container/label of complementary food(s), liquid milks, powdered milks, modified powdered milks, or powdered drinks marketed or otherwise represented as suitable for infants and young children should include a warning preceded by the expression “Important notice” against the health hazards of unsafe and inappropriate preparation, use and storage where appropriate
Questions not based on the R991	
Sweet, L., Pereira, C., Ford, R., Feeley, A. B., Badham, J., Mengkheang, K., ... & Zehner, E. (2016). Assessment of corporate compliance with guidance and regulations on labels of commercially produced complementary foods sold in Cambodia, Nepal, Senegal and Tanzania. <i>Maternal & Child Nutrition, 12</i> , 106-125.	Recommended age of introduction that is less than 6 months of age
Sweet, L., Pereira, C., Ford, R., Feeley, A. B., Badham, J., Mengkheang, K., ... & Zehner, E. (2016). Assessment of corporate compliance with guidance and regulations on labels of commercially produced complementary foods sold in Cambodia, Nepal, Senegal and Tanzania. <i>Maternal & Child Nutrition, 12</i> , 106-125.	Recommended age of introduction that is 6 months of age and above
Independently created question	Misleading pictorial representation(s) on FOP
Pereira, C., Ford, R., Feeley, A. B., Sweet, L., Badham, J., & Zehner, E. (2016). Cross-sectional survey shows that follow-up formula and growing-up milks are labelled similarly to infant formula in four low and middle income countries. <i>Maternal & child nutrition, 12</i> , 91-105.	Display of the word “formula” on FOP if the product is labelled for children over 12 months of age
Independently created question	Catchy terms on FOP suggesting the product will provide specific health benefits
Independently created follow-up question	Warning message matches the background/fades into the background

Appendix 6: Overall compliance of nutrients of concern with NPM models

NUTRIENTS OF CONCERN TO LIMIT		SA NPM				WHO NPPM				
		Total	Compliant		Non-compliant		Compliant		Non-compliant	
			n (%)	Mean (SE)	n (%)	Mean (SE)	n (%)	Mean (SE)	n (%)	Mean (SE)
Cereals (reconstituted per 100ml) (n = 58)	Total sugar (g/100g) SA NPM: $\geq 10\text{g}/100\text{g}$ WHO NPPM: $\geq 30\%$ E from sugar	58	47(81.03)	7 (0.21)	11(19)	11.3 (0.3)	37 (63.79)	23.11 (0.69)	21 (36.20)	36.06 (1.19)
	¹⁶ Total fat (g/100kcal) $>4.5\text{g}/100\text{kcal}$ (Water)	18	NA ¹⁷	NA	NA	NA	17 (94.44)	2.29 (0.15)	1 (5.55)	3.62 (0)
	$>3.3\text{g}/100\text{kcal}$ (breastmilk added)	39	NA	NA	NA	NA	10 (25.64)	1.68 (0.25)	29 (74.35)	3.76 (0.08)
	Saturated fat (g/100g) SA NPM: $\geq 4\text{g}/100\text{g}$ *2 missing	56	56 (100)	1.47 (0.09)	0	0	NA	NA	NA	NA

¹⁶ Total fat only applies to the WHO NPPM as the SA NPM only looks at saturated fat

¹⁷ NA means a specific nutrient cut-point does not apply to the WHO NPPM or the SA NPM

	Sodium SA NPM: $\geq 400\text{mg}/100\text{g}$ WHO NPPM: $>50\text{mg}/100\text{kcal}$	58	58 (100)	37.6 (2.4)	0	0	48 (82.8)	27.97 (2.09)	10 (17.24)	60.63 (1.37)	
	NSS Contains any added artificial sweetener	58	58 (100)	-	0	-	58 (100)	NA	0	0	
	Non-compliant with criteria of any nutrients of concern	58	NA	NA	11 (19)	NA	NA	NA	43 (74.1)	NA	
Follow-up formulas (reconstituted per 100ml) (n = 48)	Total sugar Liquids: $\geq 5\text{g}/100\text{ml}$	48	17 (35.4)	3.72 (0.20)	31(64.6)	6.04 (0.14)	Products that function as breast-milk substitutes are outside the scope of the WHO NPPM				
	Total fat	-	-	-	-	-					
	Saturated fat Liquids: $\geq 3\text{g}/100\text{ml}$	26	48 (100)	1.28 (0.08)	0	0					
	Sodium Liquids: $\geq 100\text{mg}/100\text{ml}$	48	48 (100)	33.36 (0.76)	0	0					
	Presence of NSS Contain any	48	48 (100)	-	-	-					
	Non-compliant with criteria of any nutrients of concern	31	-	NA	31(64.6)	NA					
Paediatric juices	Total sugar Liquids: $\geq 5\text{g}/100\text{ml}$	16	0	0	16 (100)	10.25 (0.65)					
	Total fat	-	-	-	-	-					

	Saturated fat Liquids: $\geq 3\text{g}/100\text{ml}$	16	16 (100)	0.11 (0.04)	0 (0)	0 (0)	Not appropriate for promotion			
	Sodium Liquids: $\geq 100\text{mg}/100\text{ml}$	16	16 (100)	5.12 (0.49)	0 (0)	(0)				
	Presence of NSS Contain any	16	16 (100)	NA	NA	NA				
	Non-compliant with criteria of any nutrients of concern	16	0	NA	16 (100)	NA				
Purees (n = 114)	Total sugar SA NPM: $\geq 10\text{g}/100\text{g}$	114	93 (81.57)	5.07 (0.25)	21(18.42)	12.27 (0.52)	NA	NA	NA	NA
	Dairy-based foods, desserts and cereals WHO NPPM: $\geq 40\%$ E from sugar	2	NA	NA	NA	NA	0	0	2 (100)	58.11 (0)
	Fruit-containing product, including breakfast/dairy WHO NPPM: $\geq 30\%$ E from sugar	67	NA	NA	NA	NA	2 (2.98)	16.71 (10.67)	65 (97.01)	66.21 (1.87)
	Vegetable only product WHO NPPM: $\geq 30\%$ E from sugar	10	NA	NA	NA	NA	2 (20)	12.66 (1.08)	8 (80)	44.45 (3.41)
	Savoury meals/meal components									
	Food WITHOUT protein or cheese named WHO NPPM: $>15\%$ E from sugar	5	NA	NA	NA	NA	1 (20)	7.8 (0)	4 (80)	36.1 (10.01)

Food WITH CHEESE named but no protein WHO NPPM: >15% E from sugar	3	NA	NA	NA	NA	1 (33.33)	9.08 (0)	2 (66.66)	22.49 (2.99)
Food with protein source NOT named first WHO NPPM: >15% E from sugar	25	NA	NA	NA	NA	9 (36)	8.97 (1.15)	16 (64)	21.69 (1.18)
Food with protein source named FIRST WHO NPPM: >15% E from sugar	2	NA	NA	NA	NA	1 (50)	3.32 (0)	1 (50)	26.19 (0)
Total fat (g/100kcal) Dairy-based foods, desserts and cereals WHO NPPM: >4.5g/100kcal	2	NA	NA	NA	NA	2 (100)	0.19 (0)	0	0
Fruit-containing product, including breakfast/dairy WHO NPPM: >4.5g/100kcal	67	NA	NA	NA	NA	67 (100)	0.49 (0.09)	0	0
Vegetable only product WHO NPPM: >4.5g/100kcal	10	NA	NA	NA	NA	10 (100)	0.43 (0.35)	0	0
Savoury meals/meal components									
Food WITHOUT protein or cheese named WHO NPPM: >4.5g/100kcal	5	NA	NA	NA	NA	5 (100)	0.70 (0.41)	0	0
Food WITH CHEESE named but no protein WHO NPPM: >6g/100kcal	3	NA	NA	NA	NA	3 (100)	3.15 (1.58)	0	0

Food with protein source NOT named first WHO NPPM: >4.5g/100kcal	25	NA	NA	NA	NA	22 (88)	1.81 (0.26)	3 (12)	5.10 (0.17)
Food with protein source named FIRST WHO NPPM: >6g/100kcal	2	NA	NA	NA	NA	2 (100)	2.01 (0.35)	0	0
Saturated fat Solids: ≥4g/100g	114	114 (100)	0.25 (0.04)	0	0	NA	NA	NA	NA
Sodium SA NPM: ≥400mg/100g	114	114 (100)	17.4 (2.05)	0	0	NA	NA	NA	NA
Dairy-based foods, desserts and cereals WHO NPPM: >50mg/100kcal	2	NA	NA	NA	NA	2 (100)	1.93 (0)	0	0
Fruit-containing product, including breakfast/dairy WHO NPPM: >50mg/100kcal	67	NA	NA	NA	NA	63 (94.02)	8.99 (1.3)	4 (5.97)	105.26 (30.71)
Vegetable only product WHO NPPM: >50mg/100kcal	10	NA	NA	NA	NA	6 (60)	14.55 (8.09)	4(40)	87.92 (9.52)
Savoury meals/meal components									
Food WITHOUT protein or cheese named WHO NPPM: >50mg/100kcal	5	NA	NA	NA	NA	3 (60)	26.76 (2.26)	2 (40)	102.89 (37.59)
Food WITH CHEESE named but no protein WHO NPPM: >100mg/100kcal	3	NA	NA	NA	NA	3 (100)	157.74 (56.5)	0	0

Food with protein source NOT named first WHO NPPM: >50mg/100kcal	25	NA	NA	NA	NA	19 (76)	32.89 (2.23)	6 (24)	84.11 (14.68)
Food with protein source named FIRST WHO NPPM: >50mg/100kcal	2	NA	NA	NA	NA	1 (50)	45.47 (0)	1 (50)	102.52 (0)
Presence of NSS Contain any	114	114 (100)	NA	0	0	114 (100)	NA	0	0
Non-compliant with criteria of any nutrients of concern	114	-	NA	21 (18.42)	NA	-	NA	113 (99.1)	NA



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Appendix 7. WHO NPPM Content and labelling requirements¹⁸ per infant food category

NUTRIENT CONTENT REQUIREMENTS		WHO NPPM (n = 172)				
		Total	Compliant		Non-compliant	
			n (%)	Mean (SE)	n (%)	Mean (SE)
Cereals (reconstituted per 100ml) (n = 58)	Energy density (kcal/100g)	58	58 (100)	113.79 (2.28)	0	0
	Total Protein (g/100kcal)	58	51 (87.9)	2.30 (0.11)	7 (12.1)	5.95 (0.02)
	Proportion (%) of protein source (for meals)	0	NA ¹⁹	NA	NA	NA
	Fruit content (% weight)	58	55 (94.82)	1.2 (0.32)	3 (5.45)	19 (5.68)
	Added Free Sugar	58	8 (13.8)	NA	50 (86.2)	NA
	Sweetener	58	58 (100)	NA	0	NA
	Age label (6 – 36 months)	58	58 (100)	6.19 (0.62)	0	0
	Front-of-pack high-sugar flag (% energy)	58	32 (55.17)	22.96 (0.87)	26 (44.82)	33.76 (1.26)

¹⁸ An analysis of the Cereals and Purees categories according to the WHO NPPM criteria and therefore no comparison could be made against the SANPM as these are different requirements

¹⁹ Not applicable (NA) means a specific requirement could not be applied to a certain category

NUTRIENT CONTENT REQUIREMENTS		WHO NPPM (n = 172)				
		Total	Compliant		Non-compliant	
			n (%)	Mean (SE)	n (%)	Mean (SE)
Purees (n = 114)	Dairy Foods					
	Energy density (kcal/100g)	2	0	0	2 (100)	51.62 (0)
	Total Protein (g/100kcal)	0	NA	NA	NA	NA
	Proportion (%) of protein source (for meals)	0	NA	NA	NA	NA
	Fruit content (% weight)	2	2 (100)	0	0	0
	Added Free Sugar	2	0	NA	2 (100)	NA
	Sweetener	2	2 (100)	0	0	0
	Age label (6 – 36 months)	2	2 (100)	7 (1.00)	0	0
	Front-of-pack high-sugar flag (% energy)	2	0	0	2 (100)	58.11 (0)
	Fruit-containing product, including breakfast/dairy					
	Energy density (kcal/100g)	67	16 (23.88)	73.27 (2.76)	51 (76.11)	45.68 (1.28)

NUTRIENT CONTENT REQUIREMENTS		WHO NPPM (n = 172)				
		Total	Compliant		Non-compliant	
			n (%)	Mean (SE)	n (%)	Mean (SE)
	Total Protein (g/100kcal)	-	NA	NA	NA	NA
	Proportion (%) of protein source (for meals)	-	NA	NA	NA	NA
	Fruit content (% weight)	-	NA	NA	NA	NA
	Added Free Sugar	67	17 (25.4)	NA	50 (74.6)	NA
	Sweetener	67	67 (100)	NA	0	NA
	Age label (6 – 12 months)	67	66 (98.5)	NA	1 (1.5)	NA
	Front-of-pack high-sugar flag (% energy)	67	2 (3)	16.71 (10.67)	65 (97)	66.21 (1.87)
	Vegetable-only product					
	Added water (%)	10	10 (100)	0	0	0
	Total Protein (g/100kcal)	-	NA	NA	NA	NA
	Proportion (%) of protein source (for meals)	-	NA	NA	NA	NA
	Fruit content (% weight)	10	10 (100)	NA	NA	NA
	Added Free Sugar	10	10 (100)	NA	0	NA

NUTRIENT CONTENT REQUIREMENTS		WHO NPPM (n = 172)				
		Total	Compliant		Non-compliant	
			n (%)	Mean (SE)	n (%)	Mean (SE)
	Sweetener	10	10 (100)	NA	0	NA
	Age label (6 – 12 months)	10	10 (100)	NA	0	NA
	Front-of-pack high-sugar flag (% energy)	10	2 (20)	12.66 (1.08)	8 (80)	44.45 (3.41)
Savoury meals/meal components	Food WITHOUT protein or cheese named					
	Energy density (kcal/100g)	5	3 (60)	66.76 (1.52)	2 (40)	48.87 (7.53)
	Total Protein (g/100kcal)	5	3 (60)	13 (4.95)	2 (40)	2.74 (0.02)
	Proportion (%) of protein source (for meals)	0	NA	NA	NA	NA
	Fruit content (% weight) *1 missing	4	3 (75)	NA	1 (25)	NA
	Added Free Sugar	5	4 (80)	NA	1 (20)	NA
	Sweetener	5	5 (100)	NA	0	NA
	Age label (6 – 12 months)	5	5 (100)	NA	0	NA
	Front-of-pack high-sugar flag (% energy)	0	NA	NA	NA	NA
	Food WITH CHEESE named but no protein					

NUTRIENT CONTENT REQUIREMENTS		WHO NPPM (n = 172)				
		Total	Compliant		Non-compliant	
			n (%)	Mean (SE)	n (%)	Mean (SE)
Energy density (kcal/100g)	3	2 (66.7)	78.03 (14.46)	1 (33.3)	47.08 (0)	
Total Protein (g/100kcal)	3	2 (66.7)	5.23 (0.82)	1 (33.3)	2.12 (0)	
Proportion (%) of protein source (for meals)	3	3 (100)	10.33 (4.37)	0	0	
Fruit content (% weight)	3	3 (100)	0	NA	NA	
Added Free Sugar	3	3 (100)	0	NA	NA	
Sweetener	3	3 (100)	0	NA	NA	
Age label (6 -12 months)	3	3 (100)	NA	0	NA	
Front-of-pack high-sugar flag (% energy)	0	NA	NA	NA	NA	
Food with protein source NOT named first						
Energy density (kcal/100g)	25	20 (80)	79.88 (5.03)	5 (20)	45.36 (7.86)	
Total Protein (g/100kcal)	25	25 (100)	7.84 (0.84)	0	0	
Proportion (%) of protein source (for meals)	24	14 (58.33)	13.15 (1.12)	10 (41.66)	6.7 (0.49)	
*1 missing						
Fruit content (% weight)	23	19 (82.6)	0.05 (0.05)	4 (17.39)	11.75 (3.32)	
*2 missing						

NUTRIENT CONTENT REQUIREMENTS		WHO NPPM (n = 172)				
		Total	Compliant		Non-compliant	
			n (%)	Mean (SE)	n (%)	Mean (SE)
	Added Free Sugar	25	24 (96)	NA	1 (4)	NA
	Sweetener	25	25 (100)	NA	0	NA
	Age label (6 – 12 months)	25	23 (92.0)	NA	2 (8.0)	NA
	Front-of-pack high-sugar flag (% energy)	0	NA	NA	NA	NA
Food with protein source named FIRST						
	Energy density (kcal/100g)	2	0	NA	2 (100)	45.53 (9.44)
	Total Protein (g/100kcal)	2	2 (100)	7.21 (1.93)	0	0
	Proportion (%) of protein source (for meals)	2	2 (100)	24.5 (16.5)	0	0
	Fruit content (% weight)	2	1 (50)	0	1 (50)	40 (0)
	Added Free Sugar	2	1 (50)	0	1 (50)	0
	Sweetener	2	2 (100)	0	0	0
	Age label (6 -12 months)	2	2 (1000)	NA	0	NA
	Front-of-pack high-sugar flag (% energy)	0	NA	NA	NA	NA