CONSULTATION ON DRAFT FOOD (AMENDMENT) REGULATIONS 2017

Aim

The Agri-Food and Veterinary Authority (AVA) is seeking feedback from the food industry (local food manufacturers and importers) on the draft Food (Amendment) Regulations 2017, which is targetted to come into effect in the first quarter of 2017.

Summary of amendments

The draft Food (Amendment) Regulations 2017 contains trade facilitating measures, such as provisions for the use of new additives and ingredients in food, extension of use of existing food additives, as well as provisions for the use of a new health claim relating to barley beta-glucan.

Maximum limits for the contaminants inorganic arsenic (in polished rice) and lead (in infant formula) will be tightened to better protect consumers. Other changes include a new presentation format for enzymes permitted under the Eighth Schedule and amendments to the quality criteria for sesame oil and sunflower seed oil.

A detailed description on the proposed changes can be found in the **ANNEX**. The legal text of the amendments can be downloaded from AVA's website at:

> http://www.ava.gov.sg/legislation *(select "Sale of Food Act", then click on "Draft Food (Amendment) Regulations 2017)*

Request for comments

AVA invites views and comments on the draft Food (Amendment) Regulations 2017. All submissions should be clearly and concisely written, and should provide a reasoned explanation for any proposed revisions.

Submissions should reach AVA no later than 6:00 p.m., 20 February 2017, through mail, or email, to the following addresses:

Mail:
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ANNEX

PROPOSED AMENDMENTS TO THE FOOD REGULATIONS

(A) TO ALLOW THE USE OF NEW FOOD ADDITIVES AND INGREDIENTS

1. Spirulina extract (INS 134) or cyanobacterial-phycocyanin (C-PC) extracted from *Spirulina platensis*, a colouring matter, will be included in Part II of the Fifth Schedule and permitted for use in food under good manufacturing practice. Spirulina extract has been approved for use as a colouring matter in food in several countries, including Japan, Korea and the United States.

2. Beet red (INS 162) (obtained from the roots of red beets as press juice or by aqueous extraction of shredded beet roots) will be listed as a permitted colouring matter under Part II of the Fifth Schedule.

3. Beta-palmitin will be permitted for use in infant formula, at levels not exceeding 80% of the total fat content of infant formula. Beta-palmitin is a vegetable oil blend that is enzyme-modified to increase the content of palmitic acid at the sn-2 or beta position of the glycerol molecule. As cow's milk contains approximately 23 times less beta-palmitin as compared to human milk, beta-palmitin is added to infant formula as a blend with other vegetable oils, to emulate levels present in human breast milk and provide an appropriate balance of fatty acids and triglycerides suitable for infants. The proposed maximum level (80% of total fat content of infant formula) is consistent with the level published in the legislation of Canada and the United States.

4. L-theanine, a flavour enhancer, will be permitted for use in brewed tea, soft drinks, chocolate, chocolate confectionery, and sugar confectionery, at levels not exceeding 1000 ppm. L-theanine is an amino acid that can be extracted from tea leaves or synthesized using enzymes. It has been approved for use in food in several countries, such as Japan, Korea, Taiwan and the United States.

5. Sodium ferrous citrate, a nutrient supplement, will be permitted for use in food as a source of iron. It has been approved as a nutrient supplement in Japan and the United States.

6. A total of 219 new enzymes will be permitted for use in food under good manufacturing practice. These enzymes have a long history of usage by the food industry, and have been approved for use in food in several countries, including Australia, Brazil, Canada, China, Denmark, France, Japan, Korea, Mexico, New Zealand and the United States. The 219 new enzymes, together with the existing 26 permitted enzymes, will be listed under a new section "Permitted Enzymes" in the Eighth Schedule, according to their Enzyme Commission (EC) numbers, donor organisms and donor genes (for enzymes produced from genetically modified microbial sources). The revised format for listing of the permitted enzymes is similar to that of countries such as Australia, Canada and New Zealand.

(B) TO EXTEND THE USE OF EXISTING FOOD ADDITIVES TO ADDITIONAL FOOD CATEGORIES

1. Propionic acid (and its sodium, calcium and potassium salts) (INS 280, 281, 282 and 283) will be allowed in the food categories “Hamburgers and similar products”, “Meat, canned, cured, pickled, salted or smoked whether cooked or uncooked”, and “Sausages, or sausage meat”, at levels up to 2500 ppm (as propionic acid). The Codex Alimentarius Commission has endorsed the use of propionic acid (and its sodium, calcium and potassium salts) in “processed meat, poultry, and game products”.

2. Sulphur dioxide and sulphites (INS 220 – 228, 539) will be allowed in herbs and spices, at levels up to 150 ppm (calculated as sulphur dioxide), and in all types of flour, at levels up to 200 ppm (calculated as sulphur dioxide), to be in line with the levels adopted by the Codex Alimentarius Commission. As a consequential amendment, the current category in the Fourth Schedule, “Ginger, dry root” will be deleted and the category subsumed under the new category “Herbs and spices”.

3. Quillaia extracts (Types I and II) (INS 999(i) and (ii)) will be allowed for use in alcoholic beverages, up to a maximum level of 40 ppm (calculated as saponins). Internationally, quillaia extract has been approved for use in alcoholic beverages in Australia, the European Union and New Zealand. The maximum permitted level for quillaia extracts in soft drinks will be revised to 50 ppm (calculated as saponins), to be consistent with the maximum level endorsed by the Codex Alimentarius Commission for this food category. For consistency, provisions for quillaia extracts will be deleted from the Sixth Schedule and transferred to Regulation 21, as quillaia extracts are only permitted for use in specific food categories, and do not belong to the general emulsifiers listed under the Sixth Schedule.

4. Steviol glycosides (INS 960) will be allowed in the following food categories, at levels generally consistent with that adopted by the Codex Alimentarius Commission.

Food category	*Maximum permitted level (ppm)*
Dairy-based drinks (flavoured and/or fermented)	200
Sauces, gravies and dressings, and their mixes	350 (except for soybean sauces, where up to 165 ppm is permitted)
Seasoning and condiments (excluding sauces)	30
Confectionery (including hard and soft candy, nougats, and marzipans)	700
Cocoa and chocolate products	550
Soybean-based beverages	200
Vegetable, nut and seed spreads	330

5. Polyglycerol polyricinoleate (INS 476) will be included in the Sixth Schedule and allowed for use as a permitted emulsifier/stabiliser in food, under good manufacturing practice (GMP). As a consequential amendment, the current provisions for the use of polyglycerol polyricinoleate in chocolate will be removed from Regulation 168. Chocolate, as well as other foods, will be allowed to be added with polyglycerol polyricinoleate under GMP. The Codex Alimentarius Commission has adopted provisions for the use of polyglycerol ricinoleate in a wide range of food categories. Polyglycerol ricinoleate has also been approved for use in a variety of food products in countries, such as Australia, Canada, the European Union, New Zealand and the United States. In addition, it has been allowed for use in food products under good manufacturing practice in Japan, Korea and Malaysia.

(C) FOOD LABELLING AND HEALTH CLAIMS

1. Provisions for the use of the following new health claim relating to barley beta-glucan will be allowed. Canada and the European Union have also approved the use of this claim.

"Barley beta-glucans have been shown to lower/reduce blood cholesterol. High blood cholesterol is a risk factor in the development of coronary heart disease."

For the above claim to be used on a food containing barley beta-glucan, the following criteria must be met —

(*a*) cholesterol, saturated fatty acids and trans fatty acids within the following levels:
   (i) in the case of solid food —
      (A) not more than 20 mg of cholesterol per 100 g;
      (B) not more than 1.5 g of saturated fatty acids and trans fatty acids per 100 g; and
      (C) not more than 10% of kilocalories from saturated fatty acids and trans fatty acids; or

   (ii) in the case of liquid food —
      (A) not more than 10 mg of cholesterol per 100 ml;
      (B) not more than 0.75 g of saturated fatty acids and trans fatty acids per 100 ml; and
      (C) not more than 10% of kilocalories from saturated fatty acids and trans fatty acids; and

(*b*) the label of the food must contain —
   (i) a statement or statements to the like effect that consumption of at least 3 g of barley beta-glucans in a day has been shown to lower blood cholesterol levels; and
   (ii) a nutrition information panel in the form specified in the Twelfth Schedule or in such other similar form as may be acceptable to the Director-General, specifying the amounts of barley beta-glucan, cholesterol, saturated fatty acids and trans fatty acids, contained in the food.".

2. In view that rice is currently packed in quantities less than 1 kg in weight, the existing requirement in Regulation 260(1)(c) to declare the net quantity in kilograms needs to be updated. Therefore, the regulation will be amended to allow the declaration of net quantity of prepacked rice in grams, or kilograms, as appropriate.

(D) MAXIMUM LIMITS FOR INCIDENTAL CONSTITUENTS IN FOOD

1. A maximum limit of 0.2 ppm for inorganic arsenic in polished rice will be introduced, so as to better protect consumer health. This is in line with the limit adopted by the Codex Alimentarius Commission in 2014. China and the European Union have adopted the same limit for polished rice. The food industry (in particular the rice traders and retailers) have been consulted during a public consultation exercise from 28 July to 2 October 2015. A post-consultation meeting (attended by rice traders and major retailers) was also held on 11 December 2015 to address their feedback. AVA's surveillance findings have indicated that inorganic arsenic levels detected in imported polished rice are within the limit of 0.2 ppm.

2. The maximum limit for lead in infant formula (as consumed) will be revised from 0.2 ppm to 0.01 ppm, in line with the limit adopted by the Codex Alimentarius Commission in 2014, to better protect infants' health. The revised limit will also apply to follow-on formula. AVA has conducted a public consultation exercise from 9 March to 9 May 2016. The infant formula industry, in particular, was supportive of the proposed amendment and informed AVA that the lead content in their companies' products intended for sale in Singapore are able to comply with the proposed revised maximum limit.

(E) DELETION OF MAXIMUM RESIDUE LIMITS FOR PESTICIDES

11 pesticides and their corresponding maximum residue limits (MRLs) will be deleted from the Ninth Schedule. The 11 pesticides are captafol, carbophenothion, chlordimeform (and its metabolites), crufomate, dioxathion, diphenyl, etrimfos, fenchlorphos, fensulphothion, formothion and mevinphos. These pesticides are no longer registered by AVA for local use, nor are they registered for use in other OECD countries, nor in the main countries which export fruits and vegetables to Singapore. Internationally, Canada and the United States have also deleted these pesticides and their associated MRLs from their legislation.

(F) REVISION OF QUALITY CRITERIA FOR SESAME OIL AND SUNFLOWER SEED OIL

The specific gravity of sesame oil will be revised to 0.915 - 0.924 while the iodine value for sunflower seed oil will be revised to 118 - 141. The revised criteria are in line with the respective values in the Codex Standard for Named Vegetable Oils (CODEX STAN 210-1999).