Notice Calling for suggestions, views, comments etc from stakeholders on the draft notification related to standards of all pulses, whole and decorticated Pearl Millet grains, Degermed Maize flour and Maize Grit, Couscous, Tempe, Textured Soy Protein, Sago flour.

- **F.No. Stds/CPL&CP/Draft Notification/FSSAI-2017.** 1. In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, in regulation 2.3 relating to "FRUIT & VEGETABLE PRODUCTS", in sub-regulation 2.3.47, in para 1, the parameter "Aflatoxin" and the entries relating thereto shall be omitted.
- 2. In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, in regulation 2.4 relating to "CEREALS & CEREAL PRODUCTS",-
- (a) In sub-regulation 2.4.6, relating to "Food Grains",-
- (i) in clause 2, serial number (vii) relating to "Aflatoxin" and the entries relating thereto shall be omitted.
- (ii) in clause 3, serial number (vii) relating to "Aflatoxin" and the entries relating thereto shall be omitted.
- (iii) in clause 5, serial number (vi) relating to "Aflatoxin" and the entries relating thereto shall be omitted.
- (iv) in clause 15, serial number (vii) relating to "Aflatoxin" and the entries relating thereto shall be omitted.
- (v) for clause 4, the following clause shall be substituted, namely;-

4. JAWAR:

Jawar shall be the dried mature grains of Sorghum Vulgare Pers. and shall be sweet, hard, clean and wholesome. These shall also conform to the following standards, namely:—

Parameters	Limits
Moisture	Not more than 16.0 per cent by weight
	(obtained by heating the pulverised grains at
	130°C-133°C for two hours).

Foreign matter -Extraneous	Not more than 1 per cent. by weight of which
Matter	not more than 0.25 per cent. by weight shall
	be mineral matter and not more than 0.10 per
	cent by weight shall be impurities of animal
	origin.
Other edible grains	Not more than 3 per cent by weight.
Damaged grains	Not more than 6 per cent by weight our of
	which ergot affected grains shall not exceed
	0.05 percent by weight.
Weevilled grains	Not more than 6 per cent by weight.
Uric acid	Not more than 100 mg per kg

Provided that the total of foreign matter, other edible grains and damaged grains shall not exceed 10 per cent by weight.

- (vi) the clauses 6,7,8,9,10,11,12,13 and 14 respectively for Masur whole, Urd whole, Moong whole, Chana whole, Split pulse (dal) Arhar, Split Pulse (Dal) Moong, Split Pulse (Dal) Urad, Dal Chana and Split Pulse Masur shall be omitted.
- (vii) after clause 21 the following clauses shall be inserted, namely:-

22. Common Standards for all Pulses

1. Description

This Standard applies to the whole or shelled or split pulses. They shall be free from toxic or noxious seeds and added coloring matter.

The pulses covered by this Standard are the following:

- 1. Lentil (Masur) *Lenil esculenta* Moench *or Lens culinaris* Medik *or Ervem lens* Linn,
- 2. Black gram (Urd) Phaseolus mungoLinn,

- 3. Green gram (Moong) Phaseolus aureus Roxb., Phaseolus radiatus Roxb.
- 4. Bengal gram (Chana /Chick pea) / Kabuli chana,/Chhole/(green chick pea) hara chana *Cicer arietinum* Linn
- 5. Red gram (Arhar) Cajanus cajan (L) Millsp
- 6. Horse gram (Kulthi) Dolichosbiflorus
- 7. Field bean (Black, Brown, White), Sem Phaseolus vulgaris
- 8. Peas dry (Matra) -Pisumsativum
- 9. Soybean *Glycine max* Merr.)
- 10. Rajmah/ Double beans/ Broad beans/ Black beans (Phaseolus vulgaris)
- 11. Lobia/ black eyed beans or black eyed white lobia (*Vignacatjang*)
- 12. Moth bean (matki) (*Phaseolusaconitifolius* Jacq.)

It shall conform to the following standards:

Parameters	Liı	mits
Moisture Content (percent by mass), Max.		Pulses without
	14.0	seed coat - 12.0
	Not more than 1.0	0 per cent. By mass
	of which not	more than 0.25
Extraneous Matter	percent. By mas	s shall be mineral
Extraneous Matter	matter and not	more than 0.10
	percent. By mass	shall be impurities
	of animal origin.	
Defects		
 Seeds with serious defects. (Seeds in 	1.0	
which the cotyledons have been		
affected or attacked by pests; seeds		
with very slight traces of mould or		
decay; or slight cotyledon staining.) (%		
Not more than)		
 Seeds with slight defects. (Seeds which 		
have not reached normal development;		

seeds with extensive seedcoat staining,	Not more than 7.0% of which
without the cotyledon being affected;	broken pulses must not exceed
seeds in which the seedcoat is	3.0%
wrinkled, with pronounced folding or	
broken pulses *)	
 Other edible pulses (Not more than), % 	2.0
by mass	2.0
 Discoloured seeds (Not more than), % 	3.0
by mass	
Uric acid (Not more than)	100 mg per kg

^{*} Broken pulses. Broken in whole pulses in which the cotyledons are separated or one cotyledon has been broken. Broken in split pulses are pulses in which the cotyledon has been broken.

No food additive shall be allowed' under Common standards for pulses

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

23. Whole and Decorticated Pearl Millet Grains (Bajra)

1. Description

Pearl millet grains (whole or decorticated grains) shall be the dried mature grains of *Pennisetum typhoideum* Rich / *Pennisetum americanum* L.

Whole grains: These are grains of pearl millet obtained as such after proper threshing with no mechanical treatment.

Decorticated grains: These are grains of pearl millet from which outer parts, amounting to 20–22% of the weight of the whole grains have been removed in an appropriate manner using mechanical treatment including simple abrasion.

They shall be free from abnormal flavours, odours and living insects. They shall also be free from added coloring matter, moulds, weevils, obnoxious substances, discoloration, poisonous seeds etc.

They shall conform to the following standards for Whole millet grains:

Parameters	Limits
Moisture (percent by mass),	13.0
Max.	
1 Litre mass (in gms)	750-820
Extraneous matter	Not more than 1.0 per cent. By mass of which
	not more than 0.25 percent. By mass shall be
	mineral matter and not more than 0.10
	percent. By mass shall be impurities of animal

	origin.
Damaged grains percent by	6.0 out of which Ergot affected grains shall
mass (Not more than)	not exceed 0.05 per cent by mass
Weevilled grains(Not more	6 percent by count
than)	
Other edible grains percent by	2.0
mass (Not more than)	
Uric acid (Not more than)	100 mg per kg

They shall conform to the following standards for Decorticated millet grains:

Parameters	Proposed
Moisture (percent by mass),	13.0
Max.	
APPEARANCE	Hard, uniform in shape and size
Brown, white or green	
1000 KERNEL WEIGHT	4.0-8.0
Decorticated millet grains (in	
gms)	
1 Litre mass (in gms)	750-820
	730-020
Extraneous matter	Not more than 1.0 per cent. By mass of which
	not more than 0.25 percent. By mass shall be
	mineral matter and not more than 0.10
	percent. By mass shall be impurities of animal
	origin.
Damaged grains (percent by	6.0 out of which Ergot affected grains shall not
mass), Not more than	exceed 0.05 per cent by mass
Weevilled grains percent (Not	6% by count
more than)	070 by count

Immature & Shrivelled grain % by mass (Not more than)	8.0
Other edible grains (percent by mass), Not more than	2.0
ASH (percent on dry matter	
basis)	0.8 to 1.0
PROTEIN (percent by mass on a	8.0
dry basis), Not less than	
DECORTICATION %	20.0 -22.0
CRUDE FIBRE % by mass (on a	
dry basis)	2.0
FAT % by mass on a dry basis	2.0 to 4.0
Uric acid (Not more than)	100 mg per kg

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance

provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food

(b). in sub-regulation 2.4.8, for clause 1, the following clause shall be substituted, namely-

2.4.8. Cornflakes

1. Description

"CORN FLAKES means the product obtained from dehulled, degermed and cook corn (*Zea mays* L.) by flaking, partially drying and toasting. It may contain any other ingredients suitable to the product whose standards are prescribed in Food Safety and Standards (Food Products and Food Additives) Regulations, 2011. It shall be in the form of crisp flakes of reasonably uniform size and golden brown in colour. It shall be free from dirt, insects, larvae and impurities and any other extraneous matter.

It shall conform to the following standards:

Parameters	Limits
Moisture (percent by mass), Max.	7.5
Total ash excluding salt (percent on dry mass basis), Max	1.0
Ash insoluble in dilute HCl (percent on dry	0.1

mass basis), Max	
Alcoholic acidity (with 90 per cent alcohol)	Shall be equivalent to not
	more than 2.0 ml. N. NaOH
	per 100 g. of dried substance"

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food

(c). after sub-regulation 2.4.23 relating to "Durum Wheat Semolina and Whole durum wheat semolina", the following sub-regulations shall be inserted, namely-

2.4.24. Degermed Maize (Corn) Flour and Maize (Corn) Grits

1. Description

Degermed maize (corn) flour is prepared from fully mature, cleaned, free from mould degermed kernels of maize (corn), *Zea mays* L., by a grinding process in which the grain is comminuted to a suitable degree of fineness and from which bran and germ are removed. In its preparation, coarse particles of the ground maize kernel may be separated, reground and recombined with all of the material from which they were separated.

Degermed maize (corn) grits is prepared from fully mature, cleaned, free from mould, kernels of maize (corn), *Zea mays* L., by a grinding process in which the grain is comminuted to a suitable degree of fineness and from which bran and germ are almost completely removed.

Degermed Maize (Corn) Flour and Maize (Corn) Grits shall be free from abnormal flavours, odours, living insects and filth (impurities of animal origin, including dead insects).

They shall conform to the following standards:

Parameters	Limits
Moisture (percent by mass), Max.	13.0
Ash (on dry matter basis), Max %	1.0
Protein (Nx6.25) (on dry matter	7.0
basis), Min %	
Crude Fat (on dry matter basis),	2.25
Max %	
Particle Size	
	95% or more shall pass through a 0.85 (20

degermed maize flour	mesh) mm sieve
degermed maize grits	100% or more shall pass through a 2.00 mm (10 mesh) sieve
	20% or less through a 0.71 mm (25 mesh) sieve

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

2.4.25. Couscous

1. Description

Couscous is obtained from durum wheat semolina *(Triticum durum)* the elements of which are bound by adding potable water and which has undergone physical treatment such as cooking and drying.

Couscous may be prepared from a mixture of coarse and fine semolina. It can also be prepared from "coarse medium" semolina. It shall be clean and safe.

Semolina proportions in the mixture intended for the preparation of couscous are:

- 20-30% for fine semolina
- 70-80% for coarse semolina

"Coarse medium" semolina obtained from a mixture of:

- 25-30% for coarse semolina
- 70-75% for medium semolina

They shall conform to the following standards:

Parameters	Limits
Moisture (percent by mass), Max.	13.0
Ash (on dry matter basis), Max %	1.1
Granularity (microns)	min. 600(0.60 mm= 30 mesh) microns to max. 2000 microns (2.0 mm= 10 mesh), with a tolerance of 6%.

2. Food Additives

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

2.4.26. Tempe

1. Description

Tempe is a compact, white, cake-form product, prepared from dehulled boiled soybeans through solid state fermentation with *Rhizopus* spp.

Product covered by this standard shall consist of the following ingredients:

- a) Soybean (any variety)
- b) Mould of *Rhizopus* Spp. (*R.oligosporus, R. oryzae* and/ or *R. stolonifer*) mix with cooked rice powder, rice bran powder and/ or wheat bran powder as an inocula.

It shall conform to the following standards:

Parameters	Limits
Moisture (percent by mass), Max.	65.0
Protein Content (on dry matter basis), Min %	15.0
Fat Content (percent on dry mass basis), Min.	7.0
Crude Fibre (percent on dry mass basis) Max	2.5

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

2.4.27.Textured Soy Protein (Soy Bari/Soy Nuggets/ Soy Chunks/ Soy Granules)

1. Description

Textured Soy Protein (Soy Bari/Soy Nuggets/ Soy Chunks/ Soy Granules) is obtained by extrusion of defatted soy flour/ grits.

It shall conform to the following standards-

Parameter	Limits
Moisture (percent by mass), Max.	7.0
Protein (percent on dry matter basis), Min.	50.0
Fat (Not more than) on dry mass basis	1.0
Total Ash (percent on dry mass basis), Max.	7.0
Crude Fiber (percent on dry mass basis) Max.	3.5
Acid Insoluble Ash (percent on dry mass basis),	0.3
Max.	
Hexane (Not more than)	10 ppm

Urease activity- The product shall not show a change of pH by more than 0.5 as determined by urease activity method.

2. Food Additives

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

2.4.28. Sago Flour

1. Description

Sago flour is the product prepared from the pith or soft core of sago palm tree (*Metroxylon sp.*) or the Sago of Tapioca (*Manihot utilissima*). The product shall be free from off-flavours and odours. It must be free from filth (impurities of animal origin including insects) and other extraneous matters. Colour shall be white to light-brown.

They shall conform to the following standards:

Parameters	Limits
Moisture (Not more than), % by mass	13.0
Ash Inorganic extraneous matter(Not more	0.5
than), % by mass	
Acidity (mg KOH/100g) (Not more than),	220
% by mass	
Starch content (Not less than), % by mass	96.0

Crude fibre (Not more than), % by mass	0.2
Particle size	Not less than 95% flour shall pass
	through a 100 mesh sieve

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.