Notice Calling for suggestions, views, comments etc from stakeholders on the draft amendment notification of Food Safety and Standards (Food Product Standards and Food additives) Regulation, 2011 relating to standards of quick Frozen french fried potatoes; Canned chestnuts; Canned chestnut puree; Edible fungus products, Ginger (sonth, Adrak); Ginger (sonth, Adrak); Tomato ketchup; Tomato sauce.

**F.No.Stds/F&VP/Notifications(05)/FSSAI-2016.-** In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011(hereinafter referred to as the said regulations),in regulation 2.3 relating to "FRUIT & VEGETABLE PRODUCTS",-

(I) after sub - regulation 2.3.59, the following shall be inserted, namely:-

#### **"2.3.60 Quick Frozen French Fried Potatoes**

#### 1. Description

Quick Frozen French Fried Potatoes is the product prepared from clean, mature, sound tubers of the potato plant of the species *SolanumtuberosumL.,SolanumAndigenaL.* and rhizomes of the sweet potato of the species *Ipomoea batatas*. They shall have been sorted, washed, peeled, cut into strips, and treated as necessary to achieve satisfactory colour and fried in edible oil or fat prescribed under Food Safety and Standards (Food Products and Additives) Regulations, 2011. The treatment and frying operations shall be sufficient to ensure adequate stability of colour and flavour. The product is subjected

to a freezing process in appropriate equipment until its temperature has reached -18°C at the thermal centre after thermal stabilization.

Sugars (sucrose, invert sugar, dextrose, fructose, glucose syrup, and dried glucose syrup), salt (Sodium Chloride), spices, herbs and condiments and batters may be added as optional ingredients.

The product shall be presented in one of the following styles:

(a) **Straight cut-** strips of potato with practically parallel sides and with smooth surfaces.

(b) **Crinkle cut-** strips of potato with practically parallel sides and in which two or more sides have a corrugated surface.

(c )**Other Styles-**Any other presentation of the product, distinctive from above two styles to be adequately described on the label.

**Dimension of Cross Section:** The cross sectional dimensions of strips of quick frozen French fried potatoes which have been cut on all four sides shall be uniform and not be less than 4 mm when measured in the frozen condition.

### Designation

Dimension in mm across the largest cut surface

Shoestring	4 -8
Medium	8 -12
Thick cut	12 -16
Extra large	greater than 16

The product shall conform to the following requirements:

S.No	Characteristics	Requirements
1.	Moisture content % (m/m) (Maximum)	78
2.	Free Fatty Acid content in the oil extracted % (m/m as oleic acid) (Maximum)	1.5
3.	Frying defects(burnt pieces) % (m/m) (Maximum)	0.5
4.	Oil Content % (m/m) (Maximum)	6.0

### 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. Hygiene

The products 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. 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 of Method of Analysis of Food.

### 2.3.61 Canned Chestnuts And Canned Chestnut Puree

### 1. Description

(a)Canned chestnuts is the product (i) prepared from fresh, sound, mature chestnuts of varieties conforming to the characteristics of the species *Castaneacrenata*Sieb et Zucc. (Japanese chestnut) or *Castanea sativa* Miller (European chestnut) which shall be shelled and may be pellicled or unpellicled; (ii) packed with or without water which may or may not contain sugars, seasonings and other ingredients appropriate to the product; and (iii) processed by heat in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage.

It may contain "salt" (sodium chloride) in an amount not exceeding 1 percent of total net contents.

(b) Canned chestnut puree is the product (i) pureed by sieving, or other mechanical means in order to obtain a fruit pulp from chestnuts, as defined at (a) (i) above; (ii) packed with or without sugars and other ingredients appropriate to the product; and (iii) heat processed by a procedure as defined above in (a) (iii).

It may contain "sugars", as listed in 3(i) (b). They shall amount to not more than 2 percent of total net contents. It may contain "salt" (sodium chloride) in an amount not exceeding 1 percent of total net contents.

# 2. Styles

(i) Canned Chestnuts.- Canned chestnuts may be packed in the following styles:-

(a) Whole - whole chestnuts which are pellicled or unpellicled and/or trimmed into a practical tetrahedron.

(b) Brokens - small pieces which may not be uniform in size and/or shape.

### (ii) Canned Chestnut Puree

(a)Sweetened - with added sugars; not less than 12 percent total soluble solids ( $12^{\circ}$  Brix).

(b)Unsweetened - without added sugars; not less than 10 percent total soluble solids (10° Brix).

### (iii) Other Styles

The product may be presented in any other presentation provided it:

(a) is sufficiently distinctive from other forms of presentation laid down in this standard;

(b)meets all other requirements of this standard; and

(c)is adequately described on the label to avoid confusing or misleading the consumer.

### **3. Essential Composition & Quality Factors**

(i) **Packing Media.-** Where a packing medium is used, it may consist of:

(a) Water - in which water is the sole packing medium;

(b) Water which may have one or more of the following nutritive sweeteners as prescribed in Food Safety & Standards (Food Product Standards and Food Additives) Regulation, 2011: sucrose, invert sugar syrup, dextrose, dried glucose syrup, glucose syrup, fructose, fructose syrup, honey.

### (ii) Classification of packing media when nutritive sweeteners are added

When nutritive sweeteners are added to water, the liquid media shall be classified on the basis of the cut-out strength as follows:

Slightly sweetened water/ Extra light syrup	Not less than 10° Brix but less than 14° Brix
Light syrup -	Not less than 14° Brix but less than 18° Brix
Heavy syrup -	Not less than $18^{\circ}$ Brix but less than $22^{\circ}$ Brix
Extra Heavy syrup -	Not less than 22° Brix

The cut-out strength for any packing medium shall be determined on average, but no container may have a Brix value lower than that of the next category below.

### (iii) Quality Criteria

- (a) **Colour:** When colour is not added, canned chestnuts or canned chestnut puree shall have a normal colour characteristic of the varieties used. Browning and discolouration shall be regarded as defects.
- (b) **Flavour:** Canned chestnuts or canned chestnut puree shall have a normal flavour and odour free from flavours and odours foreign to the products.
- (c) **Texture**: Canned chestnuts shall have a reasonably uniform thick texture and shall not be excessively firm nor unreasonably soft. Canned chestnut puree shall have a uniform consistency and particle size.
- (d) **Uniformity of size** : Whole in 95 percent, by count, of units that are most uniform in size, the weight of the largest unit shall be no more than twice the weight of the smallest unit.

### (iv) Defects and Allowances

The products shall be substantially free from defects such as harmless plant material, shell, pellicle (in pellicled styles), blemished units, split and broken units (in whole styles) and discoloured units. Slight syneresis in canned chestnut puree should not be regarded as a defect. Certain common defects shall not be present in amounts greater than the following limitations:

-Not more than 14 percent by mass of chestnuts on the net drained weight; and

-Not more than 20 percent of chestnuts which are not whole on the net drained weight for the style "whole".

#### (v) Minimum Fill

The container shall be well filled with chestnuts or chestnut puree and the product (including packing medium) shall occupy not less than 90 percent of the water capacity of

the container. The water capacity of the container, is the volume of distilled water at  $20^{\circ}$ C which the sealed container will hold when completely filled.

### (vi)Minimum Drained Weight

The drained weight of the product packed with liquid packing medium shall be not less than the following percentages, calculated on the basis of the weight of distilled water at  $20^{\circ}$ C which the sealed container will hold when completely filled:

- Not less than 300 ml of water capacity of the container 60%

- Less than 300 ml of water capacity of the container 55%

The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

# 4. Food Additives

No additives are allowed in the product covered by this Standard.

# 5. Contaminants, Toxins and Residues

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

# 6. Hygiene

The products 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.

# 7. Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011. In addition the name of packing media shall be declared as part of the name or in close proximity thereto, as:

(i) when the packing medium is composed of water, the packing medium shall be declared as:

"In water" or "Packed in water".

(ii) When nutritive sweeteners are added to water, the packing medium shall be declared as:

"Slightly Sweetened Water/ Extra Light Syrup" or "Light Syrup" or "Heavy Syrup" or "Extra Heavy Syrup"

### 8. Method of Analysis

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

### 2.3.62 EDIBLE FUNGUS PRODUCTS

### 1. Description

Edible Fungus Products means products prepared from fresh edible fungi. The products may be dried edible fungi (including freeze-dried fungi, fungus grits, fungus powder), pickled fungi, salted fungi, fermented fungi, fungi in vegetable oils, quick frozen fungi, sterilized fungi, fungus extract, fungus concentrate and dried fungus concentrate.

Edible fungus products shall be clean, undamaged, free, as far as possible, of maggot damage and possess the flavour and taste appropriate to the species.

Edible Fungus products may contain salt (sodium chloride), vinegar, spices and herbs, sugars (any carbohydrate sweetening matter), refined edible vegetable oil, refined edible animal fat, butter, milk, milk powder, cream, water or any other suitable ingredients whose standards are prescribed in Food Safety & Standards (Food Product Standards and Food Additives) Regulations, 2011.

### 2. General Requirements

### (i) Styles

(A) The products may be presented in various styles, e.g. whole with stalks, whole caps(buttons) without stalks, slices, pieces and stalks, grits, powder or concentrate.

(B) Other Styles.- The product may be presented in any other presentation provided it:

(a) is sufficiently distinctive from other forms of presentation laid down inthis standard;

- (b) meets all relevant requirements of this standard, including requirements relating to limitations on defects, drained weight, and any other requirements in this standard which are applicable to that style in the standard which most closely resembles the style or styles intended to be provided for under this provision;
- (c) is adequately described on the label to avoid confusing or misleading the consumer.

# (ii) Composition

Except in the case of fungus products consisting entirely of caps or where the addition stalks is stated on the label in accordance with the labelling provisions, the number of stalks shall not exceed the number of caps.

### **3. Specific Requirements**

(i) **Dried fungi** means the product obtained by drying edible fungi of one species, whether whole or sliced. It shall conform to the following requirements:

S.No	Requirements	Limits
1	Water Content % m/m (Maximum)	
	a. Freeze-dried fungi	6.0
	b. Dried (other than freeze-dried) fungi	12.0
	c. Dried fungus Shii-ta-ke	13.0
2	Mineral impurities % m/m (Maximum)	2.0
3	Organic impurities of vegetable origin % m/m	0.02
	(Maximum) except for Shii-take mushrooms.	
	Shii-take mushrooms	1.0
4	Content of maggot damaged fungi %	
	m/m(Maximum)	
	a. Fungi	1.0 % of total damage
		including not more than
		0.5 % serious damage.
	b. Crushed fungi	6.0
	c. Carbonized fungi	2.0
	d. Damaged fungi	20.0

### (ii) Fungus Grits & Fungus Powder

Fungus grits means coarsely ground dried edible fungi of one species. Fungus Powdermeans dried edible fungi of one species ground so finely as to allow the powder to pass through a sieve having a 200 microns mesh. It shall conform to the following requirements:

S.No	Requirements	Limits
1	Water Content % m/m(Maximum)	
	a. fungus grits	13.0
	b. fungus powder	9.0
2	Mineral impurities % m/m (Maximum)	2.0

(iii) Pickled Fungi means fresh or previously preserved edible fungi of one or more species appropriately prepared after previous cleaning, washing and blanching, soaked in vinegar and with or without the addition of salt, spices, sugars, vegetable oils, acetic, lactic, citric or ascorbic acid, and then pasteurized in hermetically sealed containers. It shall conform to the following requirements:

S.No	Requirements	Limits
1	Salt (sodium chloride) % m/m(Maximum)	2.5
2	Sugars % m/m (Maximum)	2.5
3	Vinegar (expressed as acetic acid) % m/m	2.0
	(Maximum)	
4	Mineral impurities % m/m(Maximum)	0.1
5	Organic impurities of vegetable origin %	0.02
	m/m (Maximum)	

6	Content	of	maggot	damaged	fungi	%	1.0% of total damage including
	m/m(Max	ximu	ım)				not more than 0.5 % serious
							damage

(iv)Fermented Fungi means fresh edible fungi of one species preserved by salt and by lactic acid fermentation. It shall conform to the following requirements:

S.No	Requirements	Limits
1	Lactic acid, (naturally occurring) % m/m	1.0
	(Minimum)	
2	Salt (sodium chloride) % m/m	3.0-6.0
3	Mineral impurities % m/m(Maximum)	0.2
4	Organic impurities of vegetable origin %	0.1
	m/m(Maximum)	
5	Content of maggot damaged fungi % m/m	4.0
	(Maximum)	

(v) Fungi in Olive Oil and other Vegetable Oils means edible fungi either fresh or previously salted, of one species, whole or sliced, packed in airtight containers in olive oil or other edible vegetable oil and heat treated to a degree to ensure the resistance of the product to spoilage. It shall conform to the following requirements:

S.No	Requirements	Limits			
1	Salt (sodium chloride) % m/m(Maximum)	1.0			
2	Mineral impurities %m/m (Maximum)	0.1			
3	Organic impurities of vegetable origin % m/m (Maximum)	0.02			
4	Maggot damaged fungi % m/m (Maximum)	1.0 % of total damage including not more than 0.5 % serious damage			

(vi) Quick Frozen Fungi means fresh edible fungi of one species which, after cleaning, washing and blanching, are subjected to a freezing process in appropriate equipment. This freezing operation shall be carried out in such a way that the range of temperature of maximum crystallization is passed quickly. The quick-freezing process shall not be regarded as complete unless and until the product temperature has reached -18oC (0oF) at the thermal centre after thermal stabilization. It shall conform to the following requirements:

S.No	Requirements	Limits		
1	Mineral impurities % m/m (Maximum)0.2			
2	Organic impurities of vegetable origin % m/m (Maximum)			
3	Maggot damaged fungi % m/m (Maximum)	<ul><li>1.0 % of total damage including not more than 0.5</li><li>% serious damage</li></ul>		

(vii) Sterilized Fungi means edible fungi, either fresh, salted or frozen, of one or more species, whole or sliced, packed in airtight containers in water and salt, and heat treated to a degree to ensure the resistance of the product to spoilage. It shall conform to the following requirements:

S.No	Requirements	Limits		
1	Salt (sodium chloride) % m/m(Maximum)	2.0		
2	Mineral impurities % m/m (Maximum)	0.2		
3	Organic impurities of vegetable origin % m/m 0.02			
	(Maximum)			
4	Maggot damaged fungi % m/m (Maximum)	1.0 % of total damage		
		including not more than 0.5		
		% serious damage		

### (viii) Fungus Extract and Fungus Concentrate

Fungus Extract means a product concentrated from fresh edible fungi juice or from dried fungi water of edible fungi of one or more species with the addition of salt and which is concentrated to 7% of saltless extract.

Fungus concentratemeans a product concentrated from fresh edible fungi juice or from dried fungi water of edible fungi of one or more species with the addition of salt and which is concentrated to 24% of saltless extract. It shall conform to the following requirements:

S.No	Requirements	Limits
1	Salt (sodium chloride) % m/m(Maximum)	20.0
2	Mineral impurities	none
3	Organic impurities of vegetable origin	none

(ix) Dried Fungus Concentrate means the dried product obtained from fungus extract or fungus concentrate. It shall conform to the following requirements:

S.No	Requirements	Limits
1	Water Content % m/m(Maximum)	9.0
2	Salt (sodium chloride) % m/m(Maximum)	5.0
3	Mineral impurities	none
4	Organic impurities of vegetable origin	none

(x) Salted Fungi (semi-processed product) means fresh edible fungi of one species, either whole or sliced, preserved in brine after previous cleaning, washing and blanching. It shall conform to the following requirements:

S.No	Requirements	Limits
1	Salt (sodium chloride) % m/m	15.0-18.0
2	Mineral impurities % m/m (Maximum)	0.3
3	Organic impurities of vegetable origin % m/m (Maximum)	0.05

# 4. Definition of Defects

- a. *Damaged fungi* means fungi with more than quarter of the cap missing.
- b. *Carbonized fungi* means whole or cut dried fungi with traces of carbonization on their surface
- c. *Crushed fungi* means parts of fungi passing through a sieve having a  $15 \times 15 \text{ mm}$  mesh for fresh fungi and a  $5 \times 5 \text{ mm}$  mesh for dried fungi.
- d. *Spoiled fungi* means fungi which are brownish or rotten as a result of attack by microorganisms and/or mould.
- e. *Maggot damaged fungi* means fungi having holes caused by maggots.
- f. *Seriously maggot damaged fungi* means fungi having four or more holes caused by maggots.
- g. *Fallen off stalks* means stalks separated from the caps.
- h. *Organic impurities of vegetable origin* means admixtures of other edible fungi, parts of plants such as leaves and pine needles.
- i. *Mineral impurities* means those substances which, after ashing, remain as insoluble residues in hydrochloric acid.

# 5. 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.

# 6. Contaminants, Toxins and Residues

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

# 7. Hygiene

The products 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.

#### 8. Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011. In addition the following shall be declared as part of the name or in close proximity thereto, as:

- (i) The terms "fungus" and "fungi" may be replaced by the terms genus or species, e.g. "mushroom" or "mushrooms" for the genus *Agaricus*. The method of processing to which the product has been subjected, e.g. "dried", "sterilized" or "quick-frozen", shall be indicated on the label.
- (ii) In the case of dried, salted, quick-frozen, fermented, pickled and canned fungi, the common name of the species of fungi shall be stated in addition to the word "fungi". The scientific name of the species shall also be stated.
- (iii) In the case of fungus products consisting of more than one species of fungus, the word "mixed" shall be indicated on the label.
- (iv) In the case of fungus products made from fungi other than fresh fungi, there shall be a statement on the label indicating the method of processing to which the fungi used in the preparation of the final product have been subjected.
- (v) Where salted fungi are used for the preparation of other fungus products, there shall be a statement on the label indicating that salted fungi have been used.
- (vi) If stalks have been added to fresh fungi or fungus products, the words "stalks added" shall appear on the label.

#### 9. Method of Analysis

As provided in the relevant FSSAI Manual of Method of Analysis of Food."

(**II**).In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, in sub-regulation 2.3.27, relating to Tomato Ketchup and Tomato Sauce,in the standards specified therein, for the entry against 'Acidity as acetic acid' the following entry shall be substituted, namely: - "**Not less than 0.2 per cent**".

**(III).** In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 in sub-regulation 2.9.11, for the words "GINGER (SONTH, ADRAK)" following words shall be substituted namely: -

"Dried Ginger (Sonth, Dried Adrak)".

(**IV**). In sub-regulation 2.9.11, in Clause 2 relating to Ginger (Sonth, Adrak) Powder, in the standards specified therein,

(a) for the entry against 'Volatile Oil content' the following shall be substituted, namely: - "Not less than 1.0 per cent"

(b) for the entry against 'Cold water soluble extract (on dry basis)' the following shall be substituted, namely: - "Not less than 10.9 per cent".