F.No.06/QAS/ 2012/ Import Issues/FSSAI
Food Safety and Standard Authority of India,
(Ministry of Health and Family Welfare)
3rd Floor FDA Bhawan, Kotla Road,
New Delhi-110002

Dated: 02nd, August 2012

ORDER

In pursuance of the meeting held on 23rd and 24th April, 2012 at CFTRI, Mysore and further meeting held on 6th July, 2012 at FSSAI, New Delhi regarding harmonization of laboratory parameters for analysis of imported food sample, parameters, limits as per Food Safety and standards Regulation, 2011 and method of analysis have been finalized.

This order will come into force with immediate effect and all Referral and Authorized Laboratories for import food samples from the date of this order shall follow the aforesaid parameters, limits as per Food Safety and Standards Regulation, 2011 and method of analysis for the food products mentioned in the document.

This issues with approval of competent Authority.

(Dr. Dhir Singh)
Director (QA & S)
FSSAI

FSSAI LAB PARAMETERS for IMPORTED FOOD & METHODS FOR STANDARDIZATION					
Sl No	Category	Items	Parameters	limit as per FSS Regulations	Method of analysis followed
1	Milk & Milk Products				
		Processed Baby Food Milk powder	**Chemical parameters**		
			i) Moisture % by wt	**i)Not more than 4.5**	**DGHS/IS 11623:1986 (R2003)**
			ii)Total milk protein,% by wt	**ii) Not less than 12.0**	**DGHS**
			iii)Milk fat % by wt	**iii) Not less than 18.0**	**DGHS**
			iv) Total ash % by wt	**iv) not more than 8.5**	**DGHS**
			v)Ash insoluble in Dil HCl,%by wt	**v)not more than 0.1**	**DGHS**
			vi)Added colour	**absent**	**DGHS**
			1) Stablizers	**2 g/ kg singly or 3 g /kg in combination max.**	**Chemical codex**
			Sodium Pottassium & calcium Chloride *INS 331,INS 332, INS 333*		
			Sodium Pottassium and Calcium cabonateINS 500 (i), INS 501 (i), INS		
			Sodium potassium and Calcium Citrate		
			Calcium salt of Orthophospheric		
			Calcium salt of poly phosporic Acid		
			Potassium Salt of Orthophospheric		
			Potassium salt of Poly phospheric		
			Sodium salt of Orthophospheric Acid		
			Sodium salt of polyphospheric Acid		
			2)Lecithins INS 322	**2)2.5 gm/Kg MAX**	**Bioelectrochemistry and Bioenergetics Volume 47, Issue 1, November 1998, Pages 25–38Chemical codex**
			3)Sodium,Potassium,Calcium Citrate	**3)2.5 gm/Kg MAX**	**Chemical codex**
			4) BHA	**4)100 ppm MAX**	**DGFS manual**
			5) Citric Acid with Sodium Hydogen-Carbonate and / or Calcium Cabonate	**5) 500 ppm MAX**	**Chemical codex**
			6)Phosphoric Acid with Sodium Hydrogen Carbonate and /or Calcium	**6) 500 ppm MAX**	**Chemical codex**

Pesticide	**(Initial screening for major pesticide groups is preffered)**	**Not more than**
1) Aldarin,Daldarin	**1)0.15 ppm (on fat basis)**	AOAC 18th edition 970.52
2) Chlordane	**2)0.05 ppm**	AOAC 18th edition 970.52
3) DDT	**3) 1.25 ppm**	AOAC 18th edition 970.52
4) Fenitrothion	**4) 0.05ppm**	AOAC 18th edition 970.52
5) Heptachlor	**5) 0.15 ppm**	AOAC 18th edition 970.52
6) Hexa chloro cycle	**6) 0.02 ppm**	AOAC 18th edition 970.52
7) CHLORINE VINPHOS	**7) 0.02 ppm**	AOAC 18th edition 970.52
8) Chlorpyrifos	**8)0.01ppm**	AOAC 18th edition 970.52
9) 2,4 D	**9)0.5ppm**	IS 14587: 2000
10) Ethion	**10)0.02ppm**	AOAC 18th edition 970.52
11) Monocrotophos	**11)0.01ppm**	AOAC 18th edition 970.52
12) Paraquat Dichloride	**12)0.01ppm**	AOAC 18th edition 970.52
13) Carbendazine	**13)0.1ppm**	AOAC 18th edition 970.52
14) Benomyl	**14)0.1ppm**	AOAC 18th edition 970.52
15) Carbofuran	**15)0.05ppm**	AOAC 18th edition 970.52
16) Cyper methrin	**16)0.01ppm**	AOAC 18th edition 970.52
17) Edifenphos	**17)0.01ppm**	AOAC 18th edition 970.52
18) Fenthion	**18)0.05ppm**	AOAC 18th edition 970.52
19) Fenvalerate	**19)0.01ppm**	AOAC 18th edition 970.52
20) Thenthoate	**20)0.01ppm**	AOAC 18th edition 970.52
21) Phorate	**21)0.05ppm**	AOAC 18th edition 970.52
22) Pirimiphos-Methyl	**22)0.05ppm**	AOAC 18th edition 970.52
23)Trichlorfon	**23)0.05ppm**	AOAC 18th edition 970.52
Heavy Metal	**Heavy Metal**	
i) Arsenic	**i)0.05 ppm**	AOAC 986.15
ii) Lead	**ii)0.2ppm**	**AOAC 972.23**
iii) Tin	**iii) 5 ppm**	**AOAC 980.19**
iv) Cadmium	**iv)0.1ppm**	**AOAC 986.15**

			Melamine	**absent**	ISO/TS 15495/ IDF/RM 230:2010 LC-MS/MS
			Aflatoxin M_1	**0.5 ppb**	AOAC 18th edition Chap.49
			Microbiological parameters		
			i) Bacterial Count per gm	**10000cfu**	APHA/FDA-BAM-2001
			ii) Coliform Count/g.	**absent**	APHA/IS:1622:1981/FDA-BAM-2001
			iii)Yeast & mold/g.	**absent**	APHA/IS 5403:1999/FDA-BAM-2001
			iv) Salmonella/g.	**absent**	APHA/FDA-BAM-2001
			v) Shigella/g.	**absent**	APHA/FDA-BAM-2001
			v)E-Coli/g.	**absent**	APHA/FDA-BAM-2001
			vi) Staphylococcus aureas/g.	**absent**	APHA/FDA-BAM-2001
			Antibiotics and drug residue	**As recommended by FSSAI**	
		Cheese*	**Moisture**	**NMT 36.0%**	**DGHS. Manual /ISO 5534|IDF 4:2004**
			Fat (ODB)	**NLT 32.0%**	**DGHS Manual/IS: 2785: 1979**
			Total Viable Count	**NMT 50,000 cfu/gm**	**FDA-BAM-2001 /APHA**
			Coliform	**<10 cfu/gm**	**FDA-BAM-2001 /APHA**
			Salt of Sodium,Potassium,Calcium salts of Mono/Di-Poly phosphates	**absent**	**Chemical codex/DGHS manual**
			Colours		
			1) Curcumin	**1)NMT 100 ppm**	**DGHS/IS:2446-1980**
			2) Riboflabin	**2)NMT 100 ppm**	**DGHS Manual**
			3) Beta Carotene	**3)NMT 100 ppm**	**DGHS Manual**
			4) Carotene	**4)NMT 100 ppm**	**DGHS Manual**
			5) Annatto extract	**5)10-50 ppm**	**DGHS Manual**
			Preservative		
			1)Sorbic Acid and its sodium photasium, calcium salts	**1)NMT 3000 ppm**	**DGHS Manual/AOAC, 18th Edn. 2005, 974.10**
			2)Nisin	**2)12.5 ppm**	**DGHS Manual**
			Microbiological Parameters* as per PFA(see the note below)		
			Total Plate Count*	**50,000 / gm Max**	**IS 5402 : 2007**
			Coliform *	**absent in 0.1 gm**	**FDA-BAM-2001 /APHA**
			*E.Coli**	**absent in 1 gm**	**FDA-BAM-2001 /APHA**

			Salmonella/25gm*	**absent in 25 gm**	**FDA-BAM-2001 /APHA**
			Staphylococcus aureus*	**absent in 1 gm**	**FDA-BAM-2001 /APHA**
			Yeast & Mould*	**absent in 1 gm**	**FDA-BAM-2001 /APHA**
			***Listeria monocytogenes** ***	**absent in 1 gm**	**FDA-BAM-2001 /APHA**
			Anerobic spore count*	**absent in 1 gm**	**FDA-BAM-2001 /APHA**
			Heavy Metals	**100/gm**	
			1)Lead	**1) NMT 2.5 ppm**	**IS 12074-1987 reaff 1998**
			3)Arsenic	**2)NMT1.1 ppm**	**IS 11124-1984 reaff-1995**
			4)Tin	**3)NMT 250 ppm**	**AOAC 966.16, AOAC 984.27, AOAC 985.35, ICP**
			6)Cadmium	**4)NMT 1.5 ppm**	**AOAC 966.16, AOAC 984.27, AOAC 985.35, ICP, AAS**
			7)Mercury	**5) NMT 1ppm**	**AOAC 966.16, AOAC 984.27, AOAC 985.35, ICP, AAS**
			Pesticides Residue	**BDL**	**DGHS Manual**
2	**Fat Oils & Fats**				
		Crude Palm Oil	**Refractive index at 40 C or**	**1.4491-1.4552**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Butyro Refractometer reading at 50^0C	35.5-44.0	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Melting Point (Open tube capillary slip method)	**Not more then 37 C**	**DGHS/AOAC 18th Edn., 2005, 920.157**
			Iodine value(Wij's Method)	**45-56**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Saponification value	**195-205**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Unsaponifiable matter	**Not more then 1.2%**	**DGHS/AOAC 18th Edn. 2005, 933.08**
			Acid Value	10.0 Max.	**DGHS/IS 548 (I),1964 Rffmd , 2006**

			Flash Point (Pensky Marten Closed Cup Method)	**Not less then 250°C**	**DGHS/IS–1448 (P-20) 1998**
			Added Colouring matter	**Absent**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Added flavouring matter	**Absent**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Test for mineral oil by HOLD	**Absent**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Test for Argemone oil	**Absent**	**DGHS MANUAL/IS: 548 Part II, 1976**
			Test for Cotton Seed Oil	**Absent**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Test for Sesame oil	**15 Red Units Max**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
		Crude Sunflower Oil	**Refractive index at 40 C**	**1.4610-1.4680**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Butyro Refractometer reading at 50 C	**62.4 to 64.7**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Acid Value	**NMT 4**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Iodine value(By Wij's Method	**118-141**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Saponification value	**188-194**	**BIS METHOD**
			Flash Point (Pensky MartenClosed Cup Method)	**Above 250 C**	**IS–1448 (P-20) 1998**
			Test ForSesame Oil	**15 Red Units Max**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Mineral Oil by TLC	**Absent**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Cotton Seed Oil(Halphen Test)	**10red unit max**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Argemone Oil	**Absent**	**DGHS MANUAL/IS: 548 Part II, 1976**
			Peroxide value		**AOAC 18th Edn, 2005, 965.33 - 41.1.16**

		Rapseed Oil (mustard oil)	**Iodine value (Wij; Method)**	**96 - 112**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Polybromide Test	**Negative**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Acid Value	**NMT 6%**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			BTT Test(acetic acid method)	**23.0 C to 27.5 C**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Refractive Index (at 40 C)	**1.4646-1.4662**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Saponification value	**168 to 177**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Argemone Oil	**Negative**	**DGHS MANUAL/IS: 548 Part II, 1976**
		Rapseed Oil (mustard oil) low erucic acid	**Total fatty acid**	**NMT 2% erucic acid**	**Fatty acid profie using GLC /AOAC**
			Acid Value	**NMT 0.6%**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Iodine value (Wij; Method)	**105-126**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			BTT Test(acetic acid method)	**NMT 19.0 C**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Refractive Index (at 40 C)	**1.465-1.467**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Saponification value	**182-193**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Argemone Oil	**Negative**	**DGHS MANUAL/IS: 548 Part II, 1976**
			Unsaponifiable matter	**NMT 20 G/Kg**	**DGHS/AOAC 18th Edn. 2005, 933.08**
		Crude Degummed Soyabean Oil	**Acid Value**	**NMT 2.5%**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Iodine value (Wij; Method)	**120-141**	**DGHS/IS 548 (I),1964 Rffmd , 2006**

			Refractive Index (at 40 C) or	**1.4649-1.4710**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Butyro Refractometer reading at 40 C	**58.5 to 68.0**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Saponification value	**189-195**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Unsaponifiable matter	**NMT 1.5%**	**DGHS/AOAC 18th Edn. 2005, 933.08**
			Phosphorous	**NMT 0.02%**	**A.O. C. S. (1989), Official Method Ca 12-55**
			Argemone Oil	**Negative**	**DGHS MANUAL/IS: 548 Part II, 1976**
		RBD Pamoline	**1) Refractive Index at at 40 C**	**1.4550-1.4610**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			2)Iodine value(WijsMethod)	**54-62**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			3) Saponification value	**195-205**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			4)Cloud Point	**Not more than 18°C**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			5)Unsaponifiable matter	**Not more than 1.2%**	**DGHS/AOAC 18th Edn. 2005, 933.08**
			6)Acid Value	**Not more than 0.5**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			7)Moisture	**Not more than 0.1%**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			8) Flash Point (Pensky Marten Closed Cup Method)	**Not less than 250°C**	**DGHS/IS-1448(P-20) 1998**
			9)Hexane	**Not more than 5ppm**	**DGHS/ A.O.C.S (1989) Official Method Ca 3b.- 87**
			Test for		
			a) Sesame oil (Baudouin test)	**Negative**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			b) Mineral oil (TLC)	**Negative**	**DGHS/IS 548 (I),1964 Rffmd , 2006**

			C) Cotton seeds oil (Halphen test)	**Negative**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			d)Argemone oil by TLC	**Negative**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			e)Castor oil by TLC	**Negative**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			f) Tri-ortho cresyl phosphate by TLC	**Negative**	**Adulterants and contaminants in Foods ICMR (1990) Page 14/DGHS**
			Proply gallate,ethyl gallate,Octyl gallate,Dodecyl gallate or mixture	**Not more than 100ppm**	**DGHS**
			Butylated Hydrooxy Anisole(BHA)	**Not more than 200ppm**	**Method using GLC**
			Any Combination of proply gallate and BHA	**Not more than 200ppm**	**Method using GLC**
			Ascorbyl palmitate/ stearate singly or in combination	**Not more than 500ppm**	**Method using GLC**
			Resin Guinace	**Not more than 100ppm**	**Method using GLC**
			TBHQ	**Not more than 200ppm**	**Method using GLC/AOAC 983.15/2002**
			Isopropyl citrate mixture/Phosphoric acid/Monoglyceride citrate(Singly or in combination)	**Not more than 100ppm**	**Method using GLC**
			Dimethyl polysioxane singly or in combination with silicon dioxide	**Not more than 10ppm**	**IS 548 (Part 1) :1964 (R 2006)**
		Olive oil	**Refractive index at 40 C**	**1.4600-.14630**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			B.R.Reading at 40 C	**51.0-55.6**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Saponification Value	**184-196**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Iodine Value	**75-94**	**DGHS/IS 548 (I),1964 Rffmd , 2006**

			Unsaponifiable matter, % by mass	**NMT 1.5%**	**DGHS/AOAC 18th Edn. 2005, 933.08**
			Acid Value	**NMT 6.0**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Bellier Turbidity Temperature, C	**NMT 17 C**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Test for presence of mineral Oil	**Absent**	**DGHS/IS 548 (I),1964 Rffmd , 2006**
			Test for presence of syntheticOil soluble Colour	**Absent**	**DGHS/IS 548 (II),1964 Rffmd , 2006**
			Test for presence of Argemone Oil	**Absent**	**DGHS MANUAL/IS: 548 Part II, 1976**
			Test for presence of sesame Seed Oil	**Absent**	**DGHS/IS 548 (II),1964 Rffmd , 2006**
			Test for presence of Cotton Seed Oil	**Absent**	**DGHS/IS 548 ,1964 Rffmd , 2006**
			Test for presence of Olive Pomace Oil	**Absent**	**DGHS/IS 548 ,1964 Rffmd , 2006**
			Test for presence of Semi Siccative Oil	**Absent**	**DGHS/IS 548,1964 Rffmd , 2006**
			Argemone Oil	**Negative**	**DGHS MANUAL/IS: 548 Part II, 1976**
3	**Fresh Fruits & vegetables**				
		All fresh Fruits	**Physical parameters**		
			rotting	**absent**	**Visual Examination**
			Rodent contamination	**Absent**	**DGHS Manual**
			Added colouring matter	**Absent**	**DGHS Manual**
			Added vax coating	**absent**	**Hexane Method**
			Mould	**Nil**	**Visual Examination**
			Pesticide (Initial screening for major pesticide groups is preffered) Not more than		
			1)Dodine	**1) 5.0 ppm**	**DGHS/AOAC 18th Edn. 2005, 970.52**
			2)Thiophenatemethyl	**2) 5.0 ppm**	**DGHS/AOAC 18th Edn. 2005, 970.52**
			3)Fenarimol	**3) 5.0 ppm**	**DGHS/AOAC 18th Edn. 2005, 970.52**
			4)Hexaconazone	**4) 0.1 ppm**	**DGHS/AOAC 18th Edn. 2005, 970.52**

		5)Dithion	**5) 0.1 ppm**	**DGHS/AOAC 18th** Edn. 2005, 970.52
		6)Difenoconazole	**6) 0.01 ppm**	**DGHS/AOAC 18th Edn. 2005, 970.52**
		7)Propineb	**1.0 ppm**	**DGHS/AOAC 18th** Edn. 2005, 970.52
		Pesticides	**NMT**	
		1)Chlordane	**1) 0.1 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		2)Dicofol	**2) 5.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		3)Dimethoate	**3) 2.oppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		4)Endosulfane	**4) 2.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		5)Fenitroteione	**5) 0.5ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		6)Inorganic Bromide	**6) 30.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		7)Hexachlorocycle-Hexane	**7) 1.0 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		8)Malathione	**8)4.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		9)Parathione	**9)0.5ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		10)Parathione Methyl	**10)0.2ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		11)Phosphamidon Residue	**11)0.2ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		12)Pyrethrins	**12)1.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		13)Chlorobenzilate	**13)1ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		14)Chlorpyrifos	**14)0.5ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		15)Chloropyrifos	**15)2.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		16)Ethion	**16) 2.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		17)Formothion	**17) 1.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
		18)Monocrotohos	**18)1.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52

			19)Paraquat Dichloride	**19) 0.05ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			20)Phosalone	**20) 5.0ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			21)Dichlortrichlorfon	**21) 0.1 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			22)Thiometon	**22) 0.5 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			23)Carbendazin	**23) 5.0 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			24)Benomyl	**24) 5.0 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			25)Captan	**25) 15.0 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			26)Carbofuran	**26) 0.10 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			27)Copper Oxychloride	**27) 20 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			28)Ethylene Bis-Dithiocarbamates	**28) 3.0 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52
			29)Phorate	**29) 0.05 ppm**	**DGHS MANUAL/AOAC 18th Edn. 2005, 970.52/USEPA 8141 A**
			30) 2,4 D	**30) 2 ppm**	**DGHS MANUAL/AOAC 18th** Edn. 2005, 970.52/USEPA 515.1
4	**Sugar**				
		Raw Sugar	**Colour**	**200 ppm, Max**	**ICUMSA GS 2/3-9-1994,ICUMSA 2-10-1998**
			Extraneous matter	**0.1% max**	**DGHS Method**
			Dirt, Filth & Iron fillings	**absent**	**DGHS Method**
			Sulphor Di-oxide content	**150 ppm max**	**DGHS Method**
			Colouring matter	**absent**	**DGHS Method**
			Moisture	**1.5% by wt max**	**DGHS Method**
			Total Sugar (Expressed as Sucrose)	**not less than 90%**	**DGHS Method**
			Metal contaminant		
			1)Lead	**1) NMT 5 ppm**	**DGHS/AOAC 972.23**
			2)Copper	**2)NMT 30 ppm**	**DGHS**
			3)Arsenic	**3)1.1PPM**	DGHS/AOAC 986.15
			4)Tin	**4)NMT 250 ppm**	**DGHS/AOAC 980.19**
			5)Zinc	**5)NMT 50 ppm**	**DGHS**
			6)Cadmium	**6)NMT 1.5 ppm**	**DGHS/AOAC 986.15**
			7) Mercury	**7) NMT 1ppm**	**DGHS/ AOAC 977.15**

5	**All fish and fish products**				
		Fish & Fish products	**Physical Examination**	**All extraneous matter to be absent**	DGHS
			Ash insoluble in Dil HCl (on dry basis)	**0.1%max**	**DGHS**
			Acidity of extractedfat (as oleic acid)	**1.5%max**	**DGHS**
			Sugar	**present**	**DGHS**
			Starch	**present**	**DGHS**
			Added Colour	**Only permitted colour**	**DGHS**
			Histamine	**up to 40mg/100g & 10/100 g as per codex**	**Journal of Chromatography A.1032**
			TVN	**3mg/100gm max**	**J. Sci. Fd. Agric. (1955), 6:207-217**
			Shigella/25gm	**Absent**	**USFDA BAM/APHA**
			Salmonella/25gm	**Absent**	**USFDA BAM/APHA**
			Total plate count /gm	**Not more than 5,00,000/g**	**USFDA BAM/APHA**
			E-Coli / gm	**Not more than 20/g**	**USFDA BAM/APHA**
			Staphlococcusaureus /gm	**Not more than 100/g**	**USFDA BAM/APHA**
			Vibrio Chloerae /25gm	**Absent**	**USFDA BAM/APHA**
			Vibrio Parahaemolyticus/25g	**Absent**	**USFDA BAM/APHA**
			Listeria monocytogenes	**absent in 25 gm**	**USFDA BAM/APHA**
			Clostridium perfringes	**Absent**	**USFDA BAM/APHA**
			Metal contaminants		
			Mercury	**0.5 ppm max**	**AOAC 18th Edn.2005; Chapter-09, 9.02.23; 977.15/AOAC 988.11**
			Cadmium	**1.5 ppm max**	**AOAC 18th Edn.2005; Chapter-09, 9.01.09; 999.11**
			Pesticides	**Not more than**	
			1)Carbaryl	**1) 0.2 ppm**	AOAC 18th Edn.2005;970.52
			2)Endosulfan	**2) 0.2 ppm**	AOAC 18th Edn.2005;970.52
			3)Hexachlorocycle Hexane and its isomers	**3) 0.25 ppm**	AOAC 18th Edn.2005;970.52
			4)Quinolphos	**4) 0.01 ppm**	AOAC 18th Edn.2005;970.52

			Antibiotic &OtherPharma-cologicallyActive substance	Categories of antibiotics to be tested	
			A) Tetracycline	**1) 0.1 ppm max**	**AOAC 18th Edn.2005; Chapter-23, 23.01.07; 986.15**
			B)Oxytetracyline	**2) 0.1 ppm max**	**AOAC 18th Edn.2005; Chapter-23, 23.01.07; 986.15**
			C) All Nitrofurans including		JAOAC; 1994; 77(2), 344-350
			1) Furaltadone	**1) Absent**	
			2) Furazoliddone	**2) Absent**	
			3) Furylfuramide	**3) Absent**	
			4) Nifuratel	**4) Absent**	
			5) Nifuroxime	**\5) Absent**	
			6) Nifurprazine	**6) Absent**	
			7) Nitrofurnatoin	**7) Absent**	
			8) Nitrofurazone	**8) Absent**	
			D)Chloranphelicol	**D) Absent**	Petz, 1983, Z.LebUnters. Forsch (176),(289-293); J.AOAC 1990 (73), 813-16 &Central Institute of Fisheries Technology Training Manual; Page No: 07-09,14,15
			E)Sulphonamide Drugs (Except Approved Sulfadinethoxine, Sulfabrononethazine and Sulfsethoxypyridazine	**E)Absent**	**J.A.O.A.C Int. (1994) 77 (3) 558-564**
			Sulphalethoxazole	**Absent**	
			Sulphamethizole	**Absent**	
			Sulphadiazine	**Absent**	
6	**Meat and Meat Products**				
		Frozen Meat	**Total Plate Count**	**100000 /gm max**	**IS 5887 (P-1):1976**
			E.coli	**100/gm max**	**IS 5887 (P-8):2002**
			Staphylococcu* s *aureus	**100/gm max**	**IS 5887 (P-4):1999**
			Clostridium botulinm and Clostridium perfringes	**30/gm max**	**IS 5887 (P-4):1999**
			Yeast & Mould	**1000 /gm max**	**IS 5887 (P-3):1999**
			Salmonella	**absent in 25 gm**	**IS 14988 (Part 1):2001**
			Listeria monocytogenes	**absent in 25 gm**	**USFDA BAM/APHA**
			Heavy metals		

			1)Lead	1) 2.5 ppm max	IS 14988 (Part 1):2001
			2) Tin	2)250 ppm max	AOAC 985.16
			Vetenary drugs	As recommended by FSSAI	
			Preservatives		
			Sodium nitrite	200 ppm, max	IS 5402:2002
		Canned meat (Canned Luncheon/Canned Cooked Ham/ Canned Chopped Meat/ Canned Chicken/ Canned Mutton and Goat Meat	Total fat content		IS 5887 (P-1):1976/IS:5960 (Part-3)-1970 (R-2005)
			a)Product with binder		
			i)Canned Chopped Meat	30 % max	
			ii)Canned Luncheon Ham	35% max	
			b)Product without binder		
			i)Canned Chopped Meat	25 % max	
			ii)Canned Luncheon Ham	30 % max	
			Total Plate Count	1000 /gm max	IS 5887 (P-1):1976
			E.coli	absent in 25 gm	IS 5887 (P-8):2002
			Staphylococcus aureus	absent in 25 gm	IS 5887 (P-4):1999
			Clostridium botulinm and Clostridium perfringes	absent in 25 gm	IS 5887 (P-4):1999
			Salmonella	absent in 25 gm	USFDA BAM/APHA
			Listeria monocytogenes	absent in 25 gm	USFDA BAM/APHA
			Incubation at 37 C for 10 days and 55 C for 7 days	No change in container	APHA# 4th Edn. 2001, 61.51
			Heavy metals		
			1)Lead	1) 2.5 ppm	AOAC 972.23/AOAC 999.11 - 2000
			2) Tin	2)250 ppm	AOAC 985.16
			Veterinary drugs**	drugs as listed by FSSAI should be screened	Depending upon the drug any
			Preservatives	as per persecribed limits	DGHS Manual
			Sodium nitrite	200 ppm, max	IS 5402:2002
7	Dry Fruits				
		Almond	Extraneous Veg matter	NMT 1.0%	DGHS Manual
			Insect Fragments	absent	DGHS Manual
			Rodent hair &Excreta	absent	DGHS Manual
			Added colour	absent	DGHS Manual
			Acidity of Extracted fats as expressed as oleic acid	NMT 1.25%	DGHS Manual
			Mould Affected	absent	DGHS Manual

			Aflatoxin Total	**30 ppb max**	**ELISA (J.European Food Research Tech; 210; 213-215; 2000) /AOAC 18th edition Chap.49**
			Pesticides &Residues		
			1)Chlorienvinphos	**1) 0.05 shell free basis max**	**DGHS MANUAL**
			2)Chlorobenzilate	**2) 0.2 shell free basis max**	**DGHS MANUAL**
			3)Ethion	**3) 0.1 shell free basis max**	**DGHS MANUAL**
			4)Carbendazim	**4) 0.10 ppm max**	**DGHS MANUAL**
			5)Benomyl	**5) 0.10 ppm max**	**DGHS MANUAL**
7	**Nuts & Rasines**				
		Cashew Nuts/Raw cashew Nuts	**Extraneous Veg matter**	**NMT 1.0%**	**Visual Examination**
			Insect Fragments	**absent**	**Visual Examination**
			Rodent hair &Excreta	**absent**	**DGHS MANUAL**
			Added colour	**absent**	**DGHS MANUAL**
			Acidity of Extracted fats as expressed as oleic acid	**NMT 1.25%**	**DGHS MANUAL**
			Mould Affected	**absent**	**DGHS MANUAL**
			Aflatoxin Total	**30 ppb max**	**ELISA (J.European Food Research Tech; 210; 213-215; 2000) /AOAC 18th edition Chap.49**
			Pesticides &Residues		
			1)Chlorienvinphos	**1)0.05 shell free basis max**	**DGHS MANUAL**
			2)Chlorobenzilate	**2)0.2 shell free basis max**	**DGHS MANUAL**
			3)Ethion	**3)0.1 shell free basis max**	**DGHS MANUAL**
			4)Carbendazim	**4)0.10 ppm max**	**DGHS MANUAL**
			5)Benomyl	**5)0.10 ppm max**	**DGHS MANUAL**
8	**Poppy seeds**	**Poppy seeds**	**Physical Examination**		**DGHS MANUAL**
			Moisture	**Not more than 11%**	**DGHS MANUAL**
			Added colouring matter	**Absent**	**DGHS MANUAL**
			Extraneous matter	**Not more than 2%**	**DGHS MANUAL**
			Non volatile ether extract on dry basis	**Not less than 40%**	**DGHS MANUAL**

			Presence of mould	**Negetive**	**DGHS MANUAL**
			Insect	**Absent**	**Visual Examination**
			Total Afflatoxin	**30 ppb max**	**AOAC 18th edition Chap.49**
			Rodent hair & Excreta	**Absent**	**DGHS MANUAL**
			Damaged by discoloured unit	**Absent**	**DGHS MANUAL**
			Salmonella/ 25gms	**Absent**	**APHA**# 4th Edn. 2001, 37.123 to 37.126
9	**Cereals &Pulses**				
		Black Matpe/Green Peas/Chick Peas/Toor/Green Moong/Red Lentils	**Moisture(Loss in weight determined as specified)**	**14.0% Max.**	**DGHS MANUAL**
			Argemone Seeds	**Nil**	**Visual Examination**
			Khesari Dal	**Nil**	**Refraction(DGHS)/ Chromatography**
			Foreign Matter	**1% by wt Max.**	**Refraction DGHS**
			1)Mineral matter	**i) 0.25% Max.**	**Refraction DGHS**
			2) Organic matter	**ii) 0.10% Max**	**Refraction(DGHS)**
			Damaged grain	**5.0% Max.**	**Refraction(DGHS)**
			Insect damaged byweevilled grain	**6.0% Max.**	**Refraction(DGHS)**
			Other Edible grain	**4.0% Max.**	**Refraction(DGHS)/IS: 4333: (Part-I): 2002**
			Insect	**Absent**	**Visual Examination**
			Microscopic Examination	**Characterstic feature**	**DGHS MANUAL**
			Rodent hair & Excreta	**Absent**	**DGHS MANUAL**
			Total Afflatoxin	**30 ppb max**	**AOAC 18th edition Chap.49**
			Presence of mould	**Negetive**	**DGHS MANUAL**
			Test for added colour	**Absent**	**DGHS MANUAL**
			Test for mineral oil	**Negetive**	**DGHS MANUAL**
			Uric Acid	**100ppm**	**DGHS MANUAL/I.S 4333**
			Pesticide (Initial screening for major pesticide groups is preffered)		**Not**
			1) Aldrin	**1) 0.01 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			2) Dieldrin	**2) 0.01 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			3)Carbaryl	**3) 1.5 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			4)Chlordane	**4) 0.02 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			5)Diazinone	**5)0.05 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			6)Dichlorvos	**6)1.0 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			7)Fenitrothion	**7) 0.02 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			8)Heptachlor	**8) 0.01 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			9)HCN	**9) 37.5 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52

			10)Hydrogen Phosphide	**10) Nil**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			11)Inorganic Bromide	**11)25 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			12)Malathion	**12) 4 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			13)Phosphamidon	**13) 0.05 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			14)Pyrethrins	**14) Nil**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			15)Chlorienvinphos	**15) 0.02 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			16)Chlorpyrfos	**16) 0.05 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			17)Ethion	**17) 0.025 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			18)Monocrotophos	**18) 0.025 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			19)Praquat Dichloride	**19) 0.1 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			20)Trichlorfon	**20) 0.05 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			21)Thiometon	**21) 0.025 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			22)Carbendazin	**22) 0.5 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			23)Benomyl	**23) 0.5 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			24)Carbofuran	**24) 0.1 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			25)Decamethrin/Deltamethrin	**25) 0.5 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			26)Fenthion	**26) 0.1 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			27)Dithiocardamates	**27) 0.20 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			28)Phenthoate	**28) 0.05 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			29)Phorate	**29) 0.05ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			30)Pirimiphos-Methyl	**30)5.0ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			31)Oxydemeton methyl	**31)0.02ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
			32) 2,4, D	**32) 0.01 ppm**	DGHS MANUAL/AOAC 18th Edn. 2005, 970.52
10		Red Lentils/Green moongs	**Insect**	**Nil**	**Refraction(DGHS)**
			Argemone Seeds	**Nil**	**Visual Examination**
			Khesari Dal	**absent**	**Visual Examination/ chromatography**
			Foreign Matter	**Max 1% by wt**	**Refraction(DGHS)**
			1)Mineral matter	**NMT 0.25 % by wt**	**Refraction DGHS**
			2) Organic matter	**NMT 1.0% by wt**	**Refraction DGHS**
			Damaged grain	**NMT 5% by wt**	**Refraction(DGHS)**
			Insect damaged by weevilled grain	**NMT 6% by count**	**Refraction(DGHS)**
			Other Edible grain	**NMT 3% by wt**	**Refraction(DGHS)/IS: 4333: (Part-I): 2002**
			Microscopic Examination	**Characterstic feature**	**Visual Examination**
			Rodent hair & Excreta	**Absent**	**DGHS MANUAL**
			Moisture(Loss in weight determined as specified)	**NMT 14% by wt**	**DGHS MANUAL**

Presence of mould	**Absent**	**DGHS MANUAL**
Test for added colour	**Negetive**	**DGHS MANUAL**
Test for mineral oil	**Absent**	**TLC METHOD**
Total Aflatoxin	**30 ug/kg**	AOAC-993.16, 2000/AOAC 18th edition Chap.49/ AOAC-993.16, 2000
Uric Acid	**100ppm**	**DGHS MANUAL**
Pesticide residue (Initial screening for major pesticide groups is preffered) Not more than		
1) Aldrin	**1) 0.01 ppm Max**	DGHS/AOAC 18th Edn. 2005, 970.52
2) Dieldrin	**2)0.01 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
3)Carbaryl	**3)1.5 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
4)Chlordane	**4)0.02ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
5)Diazinone	**5)0.05 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
6)Dichlorvos	**6)1.0ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
7)Fenitrothion	**7)0.02ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
8)Heptachlor	**8)0.01ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
9)HCN	**9)37.5ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
10)Hydrogen Phosphide	**10)Nil**	DGHS/AOAC 18th Edn. 2005, 970.52
11)Inorganic Bromide	**11)25ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
12)Malathion	**12)4ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
13)Phosphamidon	**13)0.05ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
14)Pyrethrins	**14)Nil**	DGHS/AOAC 18th Edn. 2005, 970.52
15)Chlorienvinphos	**15)0.02ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
16)Chloriopyrfos	**16)0.05ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
17)Ethion	**17)0.025ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
18)Monocrotophos	**18)0.025ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
19)Praquat Dichloride	**19)0.1ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
20)Trichlorfon	**20)0.05ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
21)Thiometon	**21)0.025ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
22)Carbendazin	**22)0.5 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
23)Benomyl	**23)0.5 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
24)Carbofuran	**24)0.1 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
25)Decamethrin/Deltamethrin	**25)0.5 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
26)Fenthion	**26)0.1 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
27)Dithiocardamates	**27)0.20 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
28)Phenthoate	**28)0.05 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
29)Phorate	**29)0.05 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
30)Pirimiphos-Methyl	**30)5.0 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52
31)Oxydemeton Methyl	**31)0.02 ppm**	DGHS/AOAC 18th Edn. 2005, 970.52

11	**Salt &Spices inclusive Dry Fruits Nuts/Betel Nuts/ Curry powder/masala powder**				
		Saffron	**Extraneous matter**	1% by wt	**DGHS Manual**
			Floral waste	**NMT 10% BY WT**	**DGHS Manual**
			Moisture and volatile matter at 103 C	**NMT 12%**	DGHS/AOAC Chapter 43 17th Edn. 986.21/IS: 5453 P-II: 1996 Reaff. 2001
			Total Ash on Dry basis	**NMT 8% by wt**	**DGHS/AOAC Chapter 43 17th Edn. 941.12/IS: 5453 P-II: 1996 Reaff. 2001**
			Ash insoluble in Dil HCl on dry basis	**NMT 1.5 % by wt**	**DGHS/AOAC Chapter 43 17th Edn. 941.12/IS: 5453 P-II: 1996 Reaff. 2001**
			Solubility in cold water on dry wt basis	**NMT 65% by wt**	**DGHS Manual**
			Bitterness expressed as direct reading of absorbance of picrocrocin at about 257 nm on dry basis	**NLT 30% by wt**	**DGHS Manual**
			Safranal expressed as direct reading of absorbance of 330 nm on dry basis	**NLT 20%-NMT 505 by wt**	**DGHS/I.S 5453 (PartII) - 1966**
			Colouring strength expressed as direct reading of absorbance of 440 nm on dry basis	**NLT 80% by wt**	**DGHS Manual**
			Total Nitrogen on dry basis	**NMT 2.0% by wt**	**DGHS/AOAC Chapter 43 17th Edn. 920.173/IS: 5194-1996**
			Crude Fibre on dry basis	**NMT 6% BY wt**	**DGHS Manual**
			Added colour/ Artificial Colour	**Absent**	**DGHS Manual**
			Microbiological parameters		
			1)Salmonella	**1)Absent in 25 gm**	**APHA METHOD/USDA BAM**
		Split cassia	**Physical Examination**	free from fungal growth	**Visual Examination**
			Extraneous matter	**1%MAX**	**DGHS MANUAL**
			Moisture	**12% max**	**DGHS MANUAL**
			Total Ash(on dry wt basis)	**5%max**	**DGHS MANUAL**
			Ash in soluble in Dil HCl on dry basis	**1%max**	**DGHS MANUAL**
			Volatile oil content(V/w)	2.0 % Min.	**DGHS MANUAL**
			Insect	**Absent**	**DGHS MANUAL**
			Rodent hair &excreta	**Absent**	**DGHS MANUAL**

		Added colouring matter	**Absent**	**DGHS MANUAL**
		Coumarin		
		Microbological parameters		
		1)Salmonella absent in 25 gm	**Absent in 25 gm**	**APHA METHOD**
		Pesticides & Residues		
		1)Inorganic Bromide	**1) 400 ppm max**	**AOAC Method 986.21**
	Cloves	**Physical Examination**		**Visual Examination**
		Extraneous matter	1.0% Max.	**DGHS MANUAL**
		Moisture	**12.0% max**	**DGHS MANUAL**
		Tendrils,Mother Cloves	**2% max**	**DGHS MANUAL**
		Khokar Cloves	**2% max**	**DGHS MANUAL**
		Volatile oil content	**17% min**	**DGHS MANUAL/A.O.A.C 17th edn ,**
		Headless cloves	**2%max**	**Visual Examination**
		Insect Fragments	**Absent**	**DGHS MANUAL**
		Rodent hair &Excreta	**Absent**	**Visual Examination**
		Insect damaged cloves	**NMT 2.0 by wt**	**DGHS MANUAL**
		Added colouring matter	**Absent**	**DGHS MANUAL**
		Damaged/discoloured cloves	**Absent**	**Visual Examination**
		MicrobiologicalAnalysis		
		1)Salmonella absent in 25 gm	**Absent in 25 gm**	**APHA METHOD**
	Mace	**Extraneous matter % w/w**	**NMT 0.5%**	**Visual Examination**
		Moisture % w/w	**NMT 10.0%**	**DGHS MANUAL**
		Total ash in dry basis	**NMT 4%**	**DGHS MANUAL**
		Ash insoluble in Dil HCl on dry basis % w/w	**NMT 0.5%**	**DGHS MANUAL**
		Volatile oil content on dry basis	**NLT 7.5%**	**DGHS MANUAL/AOAC 962.17**
		Mould growth	**Absent**	**Visual Examination**
		Insect damaged matter % w/w	**NMT 1.0%**	**Visual Examination**
		Live & dead insects insect fragments	**Absent**	**Visual Examination**
		Rodent contamination	**Absent**	**DGHS MANUAL**
		Nutmeg in Mace % w/w	**NMT 1.0%**	**Visual Examination**
		Added colouring matter	**absent**	**DGHS MANUAL**
		Microbiological parameters		
		1)Salmonella /25 gm	**1)Absent in 25 gm**	**USDFA BAM/APHA**
	Garlic Powder	**Extraneous Matter**	**NMT 0.5%**	**DGHS MANUAL**
		Moisture	**NMT 5%**	**DGHS MANUAL**

			Total ash	**NMT 5%**	**DGHS MANUAL**
			Acid Insoluble ash	**NMT 0.5%**	**DGHS MANUAL**
			Volatile organic Sulphur compound on dry basis	**NLT 0.3%**	**DGHS MANUAL**
			Peroxidase Test	**Negative**	**DGHS MANUAL**
			Added colouring matter	**Absent**	**DGHS MANUAL**
			Salmonella	**absent in 25 gm**	**USDFA BAM/APHA**
			Afflatoxin	**30 ppm MAX**	ELISA (J.European Food Research Tech; 210; 213-215; 2000) /AOAC 18th edition Chap.49
			Metal Contaminants		
			1) Lead	**1) 10 ppm MAX**	**AOAC 18th Ed. 975.03**
			2) Copper	**2) 30 ppm MAX**	**AOAC 18th Ed. 975.03**
			3) Arsenic	**3) 5 ppm MAX**	**IS 2088 – 1983**
			4) Tin	**4)250 ppm MAX**	AOAC 18th Edn. 2005, 985.16, 980.19
			5) Zinc	**5) 50 ppmMAX**	**AAS/AOAC 18th Ed. 975.03**
			6) Cadmium	**6)1.5 ppm MAX**	**AAS/AOAC 18th Ed. 975.03**
			7) Mercury	**7) 1 ppm MAX**	**AOAC 18th Ed., 977.15**
13	**Additives**		**End use certificate is required**		
		Ammonium bicarbonate *INS 503 (ii)*	**Assay**	**Specification 99.02 % -100.5%**	**Food Chemical codex**
			Chloride	**specification 0.003%Max**	**Food Chemical codex**
			Sulpher compounds	**0.007% max**	**Food Chemical codex**
			Pb(mg/Kg)	**5 mg/kg max**	**Food Chemical codex**
		Phosphoric Acid *INS 338*	**Assay**	**Not less than as per label declaration**	**Food Chemical codex/IP 1985**
			Fluride	**10 mg/kg Max**	**Food Chemical codex**
			Pb(mg/Kg)	**5 mg/kg max**	**Food Chemical codex**
			As(mg/Kg)	**3 mg/kg max**	**Food Chemical codex**
		Monosodium Glutamate	**Purity**	**Specification 98.05 % -101.5%**	**Food Chemical codex**
			Chloride	**Max 0.2 %**	**Food Chemical codex**
			Loss on Drying % by	**Max 0.5 %**	**Food Chemical codex**
			Lead	**Max 10 mg/Kg**	**Food Chemical codex**

		Penta cake	**Non permitted food colours**	**absent**	
			P_2O_5:	**30 % max**	
			Insect infectation	**Satisfactory**	
			Mould growth	**Absent**	
			P_2O_5	**30 % max**	
		Enzyme	**Enzyme activity**	**As per enzyme characterstics**	
			Additives	**as per label declaration**	
			Mould growth	**Absent**	
14	**Thermally processedFruits &Vegetables products**				
		Tomato paste/ Tomato powder	**Physical Examination**		
			Chemical Parameters		
			Added colouring matter	**Absent**	**DGHS MANUAL**
			Total soluble Solids (w/w)	**25.0 % min**	**DGHS MANUAL**
			Container filled	**NLT 90% of net wt of container**	**DGHS MANUAL**
			Colour Added-non permitted	**Negative**	**DGHS MANUAL**
			Insects	**Absent**	**DGHS MANUAL**
			Alkalinity test		
			Microbiological Parameters		**DGHS MANUAL**
			1)Total plate count	**1) < 50 /ml**	**APHA/USDA BAM**
			2)Incubation at 37 C for 10 days and 55 C for 7 days	**2)No change in pH**	**APHA/USDA BAM**
			3)Direct mould count	**<40% positive field**	**AOAC 16.17.01/USDA BAM/AOAC 965.41**
			Preservatives		
			1)Benzoic Acid	**1) 750 ppm**	DGHS/AOAC 994.11
		Tomato sauce	**Total soluble solid salt free basis (m/m)**	**25.0 % min**	**DGHS MANUAL**
			Acidity as acetic Acid	1.0% Min.	**DGHS MANUAL**
			Container filled	**NLT 90% of net wt of container**	**DGHS MANUAL**
			Alkalinity test		
			A) Microbiological Parameters		

			1) Total plate count	<10, 000	**USFDA BAM/APHA**
			2)Mould count	< 40% Positive field examined	AOAC 18th Edn. 2005, 16.17.01
			3)Yeast &spores	<125 per 1/60 cmm	**USFDA BAM/APHA**
			Preservatives & acidifying agents		
			Fumeric Acid	**0.3% Max**	**DGHS MANUAL**
			Sorbic Acid&its Sodium,Calcium Pottasium salt	**1000 ppm Max**	**DGHS MANUAL**
			Benzoic Acid& its Sodium Potassium Salt or both	**750 ppm Max**	**DGHS MANUAL**
15	**Thermally processed Fruits & Vegetablesproducts / Fruit Juice**				
		Grape Juice	**Chemical Parameters**		
			1) Total soluble Solid	**Min 9%**	AOAC 932.12
			2) Acidity (as citric Acid)	**Max 3.5%**	**DGHS**
			3)Colour Added-non permitted	**Absent**	**DGHS/Journal of Food Technology, 1966, 1, 63-72. Official Methods of Analysis of the Associate of Official Agricultural Chemists, 7th Edition. 34.2, 34.29.**
			Added sweeteners (g/kg)	as per the reulations 2.3.6 FSSAI	Test as per added sweetner
			Pesticides	below detectable limits as in FSSI regulations	**DGHS MANUAL**
			Preservatives		
			Sorbic acid and its sodium, potassium or calcium	**500 ppm max**	**DGHS**
			Benzoic Acid	**600 ppm max**	**DGHS/AOAC 983.16/AOAC 994.11**
			Sulpher dioxide	**350 ppm max**	**DGHS**
			Heavy Metal:		
			1) Arsenic	**0.2 ppm max**	IS 2088 – 1983
			2)Lead	**1 ppm max**	AAS/AOAC 18th Ed. 975.03
			3) Tin	**250 ppm max**	AAS/AOAC 18th Ed. 975.03
			4) Zinc	**5 ppm max**	AAS/AOAC 18th Ed. 975.03
			5)Copper	**5 ppm max**	AAS/AOAC 18th Ed. 975.03
			Bacteriological Parameters		
			1)Total plate count	**50 cfu/ml**	**USFDA BAM/APHA**

			2)Coliform Count	**Absent**	**USFDA BAM/APHA**
			3)Yeast &Mould CFU/ml	**2 cfu /ml**	**USFDA BAM/APHA**
16	**Fruit Drinks**				
		Fresh Mango Fruit Drink	**Chemical parameter**		
			1)Total soluble Solid	**1) NLT 10%**	**DGHS MANUAL**
			2)Acidity (as Citric Acid)	**2)Max 3.5%**	**DGHS MANUAL**
			3) Colour Added-non-permitted	**3)Absent**	**DGHS MANUAL**
			Fruit juice content	not less than 10%	
			Heavy metals		
			Lead	**1.0 mg/kg**	AAS/AOAC 18th Ed. 975.03
			Bacteriological parameters		
			1)Total plate count	**1)50 cfu/ml**	**USFDA BAM/APHA**
			2)Yeast &Mould cfu/ml	**2) absent**	**USFDA BAM/APHA**
			3)Coliform Count	**3)2cfu/ml**	**USFDA BAM/APHA**
		Concentrated Fruit/ Vegetable juice (Juice Concentrate)	Physical appearance	pulpy, turbid/ clear	**visual examination**
			TSS	Not less than double the contents of original juice as in FSSAI regulations	**DGHS Manual**
			Acidity (as citric acid)	**Min 10%**	**DGHS Manual/AOAC 18th Edn. 2005, 950.15, 942.15**
			Colour (Non-permitted)	**absent**	**DGHS Manual**
			Synthetic color Poncea 4R	100 ppm max	**DGHS Manual**
			1)Total plate count	**1)50 cfu/ml**	**USFDA BAM/APHA**
			2)Yeast &Mould cfu/ml	**2) absent**	**USFDA BAM/APHA**
			3)Coliform Count	**3)2cfu/ml**	**USFDA BAM/APHA**
			Lead	**2.0 mg/kg**	AAS/AOAC 18th Ed. 975.03
			Benzoic acid	1500 ppm	DGHS/AOAC 994.11

17	**Sweets & Confectioneries inclusive Chewing gum**				
		Chewing Gum	**Gum**	**NLT 12.5%**	**IS 6747 : 1981/DGHS Manual**
			Moisture	**NMT 3.5%**	**DGHS Manual/IS: 6287 – 1971**
			Sulphated ash %	**NMT 9.5%**	**DGHS Manual/IS: 6287 – 1971**
			Acid insoluble Ash %	**NMT 2.0%**	**DGHS Manual/IS: 6287 – 1971**
			Reducing Sugar (calculated as Dextrose)	**NLT 4.5%**	**DGHS Manual/IS: 6287 – 1971**
			Sucrose	**NMT 70.0%**	**DGHS Manual/IS: 6287 – 1971**
			Added sweeteners (g/kg)	as per the reulations 2.3.6 FSSAI	Test as per added sweetner
			Sachharine(Sodium)	**NMT 3000ppm**	**DGHS MANUAL**
			Aspertame	**NMT 10000ppm**	**DGHS MANUAL**
			Acesulphame k	**NMT5000ppm**	**DGHS MANUAL**
			Sodium,Potassium,BenZoate/Benzoate Acid	**NMT 1500ppm**	**DGHS MANUAL**
			Sulphur Dioxide	**NMT 2000ppm**	**DGHS MANUAL**
			Sorbic Acid & its Calcium,Sodium & salts	**NMT 1500ppm**	**DGHS MANUAL**
			Added Colour	**Only permitted colour**	**DGHS MANUAL**
			Titanium Dioxide	**NMT 10000 ppm**	**AOAC, 18th Edn. 2005, 973.36/DGHS**
			Mineral Oil	**NMT 0.2%**	**DGHS MANUAL**
			erythrosine	**100 ppm max**	**DGHS MANUAL**
			L- Tartaric Acid	**NMT 3000 ppm**	**DGHS MANUAL**
		Jelly Candy Drops/Fox Blackcurrant Tin	**Physical Examination**		**DGHS Manual**
			Sulphated Ash on salt freebasis	**NMT 2.5%**	**AOAC 18th Edn. 2005, 900.02**
			Ash insoluble in Dil HCl	**NMT 0.2%**	**DGHS MANUAL**
			Added Colour (permitted)	**NMT 100ppm**	**DGHS MANUAL**
			Titanium Dioxide	**10000ppm**	**AOAC, 18th Edn. 2005, 973.36/DGHS**
			talc	**0.2%Max**	**chemical codex**
			Mineral Oil	**0.2%Max**	**DGHS MANUAL**
			Added Colour (non-permitted)		**DGHS MANUAL**
			Artificial Sweeteener)	**Absent**	
			1)Aspertame	**NMT**	**DGHS MANUAL**
			2)Acesulphame k	**1)1000ppm**	**DGHS MANUAL**
			3)Saccharin Sodium	**2)5000ppm**	**DGHS MANUAL**

			Preservatives	**3)3000ppm**	
			1)Benzoic Acid,Sodium and Pottasium Benzoate	**1)1500ppm**	**DGHS MANUAL**
			2)Sulphur Dioxide	**2)2000 ppm**	**DGHS MANUAL**
			3)Sorbic Acid and its Calcium,Sodium,Pottasium salts(Calculated as Sorbic Acid)	**3)2000ppm**	**DGHS MANUAL**
			Heavy Metals		
			1)Lead	**1)NMT 2 ppm**	**AAS/AOAC 18th Ed. 975.03**
			2)Copper	**2)NMT 5 ppm**	**AAS/AOAC 18th Ed. 975.03**
			3)Arsenic	**3)NMT 1ppm**	IS 2088 – 1983
			4)Tin	**4)NMT 5 ppm**	**AAS/AOAC 18th Ed. 975.03**
			5)Zinc	**5)NMT 5 ppm**	**AAS/AOAC 18th Ed. 975.03**
			6)Cadmium	**6)NMT 1.5 ppm**	**AAS/AOAC 18th Ed. 975.03**
			Erythrosine	**100 ppm max**	**DGHS MANUAL**
18	**Bakery products**				
		Food Aid Biscuits	**Acid insoluble Ash in Dil HCl (on dry wt basis)**	**Max. 0.1%**	**IS 1011-1992**
		Standrads as per FSSAI	**Acidity of extracted fat (as Oleic acid)**	**Max. 1.5%**	**DGHS MANUAL**
			Added colouring matter	**absent**	**DGHS MANUAL**
			Nature of Fat	**As per declaration of ingredients**	
			Salt (as Sodium Chloride)	**As per declaration of ingredients**	**DGHS MANUAL/IS:7874 (Part 2)-1975 Reaffirmed 2004**
			Emulsifying Agents	**Emulsifying Agents**	
			1)Sucroglycerides *INS 474*	**1)1000 ppm**	**GC-FID/GC-MS Food Additives and Contaminants**
			2) Di-Acetyl Tartaric Acid esters of Mono and Di-glycerides	**2)10000 ppm**	**Food chemical codex**
			Flour Treatment Agent	**Flour Treatment Agent**	
			1)Benzoyl Peroxide	**1)40 ppm Max**	**DGHS MANUAL**
			Synthetic colour		
			1)Ponceau 4 R	**1)100 ppm Max(singly or in combination)**	**IS: 12711:1989**
			Artificial sweetners(Singly)	**Artificial sweeteners**	
			1)Asparatame	**1)2200ppm**	**IS: 12711:1989**
			2)Acesulphame K	**2)1000 ppm**	**DGHS MANUAL**

			3) Sucralose	3)750 ppm	DGHS MANUAL
			Leavening agents		
			Ammonium carbonate	500 ppm max	DGHS MANUAL
19	Fruits & vegetables product				
		Dates	Moisture content	30%max	DGHS MANUAL/AOAC 934.06
			Ash insoluble in Dil HCl	0.1%max	
			Blemished/damaged unit	5%max	DGHS MANUAL
			Extraneous matter	1% max	DGHS MANUAL
			Insect Fragments/insect	Absent	DGHS MANUAL
			Rodent hair &excreta	Absent	DGHS MANUAL
			Added colouring matter	Absent	DGHS MANUAL
			Aflatoxin	30ppm	AOAC 18th edition Chap.49
			Microbiological parameters		
			1)Total plate count	1)NMT 40,000/gm	USFDA BAM/APHA
			2)Clostridium botulinium	2) Absent in 25 gm/ml	USFDA BAM/APHA
			Preservatives		
			1) Sulphur Dioxide,Sodium/Pottassium/Calcium Sulphide/bisulphide metasulphite expressed as SO_2	1) Only SO_2 max 50gm/ Kg	DGHS MANUAL
20	Beverages				
		Instant Coffee	Moisture(on dry basis)	4.0%Max	DGHS MANUAL/IS 2791 - 1998
		Standrads as per FSSAI 2.10	Total Ash(on dry basis)	12 % Max	DGHS MANUAL/IS 2791 - 1998
			Caffeine content (on dry basis)	NLT 2.8%	DGHS MANUAL//AOAC 18th Ed., 925.16
			Solubility in boiling water	Dissolved readily in30 secs with moderate stiring	DGHS MANUAL/IS 2791 - 1998
			Solubility in cold water at 16 ± 2 C	Soluble with moderate stirring in 3 minutes	DGHS MANUAL/IS 2791 - 1998
			Test of Chicory	Absent	DGHS MANUAL
			Insects Fragments	Absent	DGHS MANUAL
			Rodent hair & excreta	Absent	DGHS MANUAL
			Added colouring matter	Absent	DGHS MANUAL
			Heavy Metals:		
			Cu (in ppm)	30 ppb Max	AAS/AOAC 18th Ed. 971.20

	Pb (in ppm)	**2.5 ppb Max**	AAS/AOAC 18th Ed. 971.20
	As (in ppm)	**1.1 ppb Max**	IS 2088 – 1983
	Pesticides		
	1) Ethephon	**1) 0.10 ppm Max**	**DGHS MANUAL**
	2) Monocrotophos	**2) 0.1 ppm Max**	**DGHS MANUAL**
Indian Black Tea	**Total Ash determined on tea dried to a constant wt at 100 Deg C**	**NLT 4% and NMT 8%**	**DGHS MANUAL**
Standrads as per FSSAI for tea 2.10			**DGHS MANUAL**
	Total Ash soluble in boiling distilled water	**NLT 45% of Total Ash**	**DGHS MANUAL**
	Ash insoluble in HCl	1.0 % Max	
	Extract obtained by boiling dry tea(dried at constant wt at 100 Deg C) with 100 parts of distilled water for one hour under reflux	32.0% Min	**DGHS MANUAL**
	Alkalinity of water soluble ash expressed as KOH (m/m)	1.0% – 3.0%	**DGHS MANUAL**
	Crude Fibre(determined on tea dried to a constant wt at 100 Deg C	16.5% Max.	**DGHS MANUAL/IS: 10226: 1972**
	Rodent hair &excreta	**absent**	**DGHS MANUAL**
	Microscopic Examination	**Tea structure only**	**DGHS MANUAL**
	Iron filling	**absent**	**DGHS MANUAL**
	Pesticides & Residues		
	1)Dicofol	**1) 5.0 ppm**	**DGHS MANUAL**
	2)Quinolphols	**2) 0.01 ppm**	**DGHS MANUAL**
	3)Glyphosphate	**3) 1.0 ppm**	**DGHS MANUAL**
	4)Glufosinate-ammonium	**4) 0.01 ppm**	**DGHS MANUAL**
	5) Propargite	**5) 10.0 ppm**	**DGHS MANUAL**
	6) Fenzaquin	**6) 3.0 ppm**	**DGHS MANUAL**
	Metal Contaminants		
	1) Mercury	**1)1 ppm**	**AOAC 18th Ed., 977.15**
	2) Copper	**2)150 ppm**	AAS/AOAC 18th Ed. 971.20
	3) Lead	**3)10 ppm on dry matter**	AAS/AOAC 18th Ed. 971.20

21	**Proprietary Food**				
	ary Food (Need for product approval and Testing as per label declaration)	**Fruit infusion Orange spice** Proprietary food : check list of ingradients and see for whether it falls under which category or it needs product approval and then go for analysis	**Test parameters: as per the category of food / label declaration**		
			Physical parameters		
			Microbiological testing		
			Salmonella /25mg		
			Mould Growth		
			Added colouring matter	**permitted colour**	
			Preservative	**As per label/category**	
			Additives	**As per label/category & Permitted as per FSSAI regulations only**	
			Afflatoxin	**30 ppb max**	
			Metal contaminant		
			1)Lead		**IS 12074-1987 reaff 1998**
			3)Arsenic		IS 2088 – 1983
			4)Tin		AOAC 18th Edn. 2005, 985.16, 980.19
			6)Cadmium		**AAS/AOAC 18th Ed. 975.03**
			7) Mercury		**AOAC 18th Ed., 977.15**
22		**Koka Instant Noodles**	**Test parameters: as per the category of food / label declaration**		
			Added colour	**permitted colour**	**DGHS MANUAL**
			Preservative	**As per label/category**	
			Additives	**As per label/category & Permitted as per FSSAI regulations only**	
			Afflatoxin	**30 ppb max**	
			Metal contaminant		

	Propriet		1)Lead		IS 12074-1987 reaff 1998
			3)Arsenic		IS 2088 – 1983
			4)Tin		AOAC 18th Edn. 2005, 985.16, 980.19
			6)Cadmium		AAS/AOAC 18th Ed. 975.03
			7) Mercury		AOAC 18th Ed., 977.15
			Test parameters: as per the category of food / label declaration		
		Porridge Mix	Added colouring matter	Permitted colour only	
			Microbiological testing		
			Salmonella		
			Mould Growth		
			Preservative	As per label/category	
			Additives	As per label/category & Permitted as per FSSAI regulations only	
			Afflatoxin	30 ppb max	
		Seasoning powder	Physical characterstics& Insects infestation	absent	Visual Examination/USFDA Technical Bulletin No: 5 Macro Analytical Procedures Manual, Chapter: 5
			Rodent hair & Excreta	absent	DGHS Manual
			Calcium and MagnesiumCarbonate	2% max	Visual Examination
			Mould growth	absent	DGHS Manual
			Added colour	absent	DGHS Manual
			Saffron	100 ppm Max	
			Sulphor Di-oxide	NMT 1500 ppm	DGHS Manual
			Modified Starch	0.5 % of final food for consumption	DGHS Manual
			Salmonella	absent in 25 gm	USFDA BAM/APHA/IS 5402 : 2002
			Afflatoxin	30 ppm MAX	ELISA (J.European Food Research Tech; 210; 213-215; 2000) /AOAC 18th edition Chap.49
			HCN	NMT 5 ppm	IS 548: 1976 Reaff. 2006 (P-II)
			Metal contaminant		
			1)Lead	1) NMT 2.5 ppm	IS 12074-1987 reaff 1998
			2)Copper	2)NMT 30 ppm	AAS/AOAC 18th Ed. 975.03

			3)Arsenic	**3)1.1PPM**	IS 2088 – 1983
			4)Tin	**4)NMT 250 ppm**	AOAC 18th Edn. 2005, 985.16, 980.19
			5)Zinc	**5)NMT 50 ppm**	**AAS/AOAC 18th Ed. 975.03**
			6)Cadmium	**6)NMT 1.5 ppm**	**AAS/AOAC 18th Ed. 975.03**
			7) Mercury	**7) NMT 1ppm**	**AOAC 18th Ed., 977.15**
			Pesticides Residue	**BDL**	**DGHS Manual**
23	**Thermally processed vegetables products (Canned vegetables)**				
		Ice Cool Baby Corn(whole) (canned)	**Drained wt.**	**50% of net wt of contents**	**AOAC 968.30**
			Added Colour(Non-permitted colour)	**absent**	**DGHS Manual**
			Salt	**Present**	**DGHS Manual**
			Flat sour organism,CFU/gm	**Absent**	**DGHS Manual**
			Staphylococcus aurerus/25gm	**absent**	**APHA METHOD**
			Salmonella & Shigella/25gm	**absent**	**APHA METHOD**
			Clostridium botalinum/25gm	**absent**	**APHA METHOD**
			E.Coli/gm	**absent**	**APHA METHOD**
			Yeast & Mould count/gm	**absent**	**APHA METHOD**
			Vibrio Cholera/25gm	**absent**	**APHA METHOD**
			Total plate count/gm	**120**	**APHA METHOD**
			pH after incubation at 37 C for 10 days and pH after incubation at 55 C for 5 days	**No change in pH**	**APHA METHOD**
			Firming Agents		
			1)Calcium Chloride *INS 509*	**1)0.80% max**	**Food chemical codex/ DGHS Manual**
			Thickening Agent		
			1)Aerobic gum(Vegetable gum) *INS 414*	**1)10 gm/kg max**	**Food chemical codex/ DGHS Manual**
		Mushroom	**Container filled**	**NLT 90% of net wt of container**	**DGHS Manual**
			Drain weight		**AOAC 968.30**
			1) Liquid pack	**1) 50 % of net wt. of contents**	
			2) Solid pack	**2) 70 % of net wt. of contents**	
			3) Mushroom packed in sauce	**3)25 % of net wt. of contents**	
			Flat sour organism,CFU/gm	**Absent**	**USFDA BAM/APHA METHOD**

			Staphylococcus aurerus/25gm	**absent**	**USFDA BAM/APHA METHOD**
			Salmonella & Shigella/25gm	**absent**	**USFDA BAM/APHA METHOD**
			Clostridium botalinum/25gm	**absent**	**USFDA BAM/APHA METHOD**
			E.Coli/gm	**absent**	**USFDA BAM/APHA METHOD**
			Yeast & Mould count/gm	**absent**	**USFDA BAM/APHA METHOD**
			Vibrio Cholera/25gm	**absent**	**USFDA BAM/APHA METHOD**
			Total plate count/gm	**120**	**USFDA BAM/APHA METHOD**
			pH after incubation at 37 C for 10 days and pH after incubation at 55 C for 5 days	**No change in pH**	**APHA METHOD**
			Tin	**250 ppm Max**	**AOAC 18th** Edn. 2005, 985.16, 980.19
25	**Flavouring Substances**				
		Mix orange Flavour	Testing parameters as per label declaration		
			Colour		**DGHS MANUAL**
				Limit to be checked as per end use	
			Artificial Swteener		**DGHS MANUAL**
			Preservatives	**Limit to be checked**	**DGHS MANUAL**
				as per end use	
26	**Macoroni products**				
		Pasta	**Physical Examination**	**free from insects, dirt**	**Visual Examination**
			Moisture %	**NMT 12 % by wt**	**DGHS MANUAL**
			Total Ash %	**NMT 1.0 % on dry basis**	**DGHS MANUAL**
			Acid insoluble Ash %(Dil in HCl)	**NMT 0.1% by wt**	**DGHS MANUAL**
			Nitrogen %	**NLT 1.7 % on dry basis**	**DGHS MANUAL**
			Faecal Streptococci	**Absent**	**USFDA BAM/APHA METHOD**
			Added colour	Absent	**DGHS MANUAL**
27		Pop corn	**Physical Examination**		
			Insects	**Nil**	**Visual Examination**
			Argemone Seeds	**Nil**	**Visual Examination**
			Khesari Dal	**Nil**	**Visual Examination**
			Mineral matter (as defined)	**NMT 0.25%**	**Visual Examination**

			Organic matter (as defined)	**NMT 1.0%**	**By Refraction**
			Damaged grain (as defined)	**NMT 5.0%**	**By Refraction**
28	**Vegatable products/ CANNED VEGETABLES**				
		Frozen Vegetable	**Peroxidase**	**negative**	**By Refraction**
			Total Plate Count	**< 40, 000/ gm**	**IS:4333 (P-2)-2002**
			Toal Aflatoxin (B1, B2, GI& G2) UG/KG	**30 ppb Max**	**AOAC 18th edition Chap.49**
29	**Swteening Agent**				
		Honey	**Specific gravity**	**NLT 1.35**	**LCMS/MS**
		Standrads as per FSSAI	**Moisture**	**NMT 25%**	**IS: 4941: 1994**
			Total Reducing Sugar	**I)NLT 65%**	**IS: 4941: 1994 /DGHS MANUAL**
			i) for Carbia colossa and Honey dew	**II)NLT 60%**	**IS: 4941: 1994 /DGHS MANUAL**
			Sucrose	**NMT 5% by mass**	**DGHS MANUAL**
			i) for Carbia colossa and Honey dew	**NMT 10% by mass**	
			Fructose-glucose ratio	**NLT 0.95%**	**IS: 4941: 1994**
			Ash	**NMT 0.5 %**	**IS: 4941: 1994**
			Acidity	**NMT 0.2%**	**IS: 4941: 1994**
			Fiehe's Test	**Negative**	**IS 4941:1994,**
			i) Hydroxy Methyl furfural,mg/kg	**NMT 80**	**IS: 4941: 1994**
			Foreign matter (Extraneous matter),	**absent**	**DGHS MANUAL**
			Fragments of insects	**absent**	**DGHS MANUAL**
			Monosodium glutamate	**absent**	**IS: 4941: 1994**
30	**Beverages**				

		Alcoholic	**1)Total fat content**	**As per BIS specifications for different categories**	**BIS satandards**
			Alcoholic content		
			Total Acid as Tartaric Acid expressed in terms of 100 Ltrs of absslute alcohol		IS: 3752: 2005
			Volatile Acid as Acetic Acid Expressed in terms of 100 Ltrs of absl alcohol		IS: 3752: 2005
			Chloral Hydrate		IS: 3752: 2005
			Paraldhyde		
			Tranquilizer		
			Ethyl Alcohol		IS: 3752: 2005
			Ash content		IS: 3752-2005, SP-18 (P10)-1984
			Residue on evaporation		IS: 3752: 2005
			Total Acidity		IS: 3752: 2005
			Volatile Acidity		IS: 3752: 2005
			Fixed Acidity		IS: 3752: 2005
			Esters		IS: 3752: 2005
			Higher Alcohols		IS: 3752: 2005
			Aldehydes		IS: 3752: 2005
			Methyl alcohol		IS: 3752: 2005/AOAC 18th Edn. 2005, 972.11
			Sulphur dioxide		IS11124: 1984 Reaff 2004/ AOAC 18th Edn. 2005, 990.28
			Copper		APHA3030D, 3030J: 1992/IS: 3752: 2005/AOAC 18th Edn. 2005, 985.35
			Iron		APHA3030D, 3030J: 1992/IS: 3752: 2005IS: 3752: 2005
			Arsenic		APHA3030D, 3030J: 1992/IS: 3752: 2005IS: 3752: 2006
			Lead		APHA3030D, 3030J: 1992/IS: 3752: 2005IS: 3752: 2007
			Caramel (Qualitative)		AOAC, 18th Edn. 2005, 948.07
			Furfural		IS: 3752: 2005
			Color		DGHS Manual
			pH		
			Residue on evaporation		IS: 3752: 2005
			added colour		IS: 3752: 2005
			suspended or sediment particle		DGHS Manual
			Artificial Sweetner		

			Sedative		
			Sulphor Di-oxide(According to nomenclature of the product)		
			Methyl Alcohol		
31		Non Alcoholic Beverages	Caffeine	**145 ppm max**	**IS 3077 - 1998/DGHS**
		Standrads as per FSSAI	Estergum	**100 ppm max**	
			Quinine salts as quinine sulphate	**100 ppm max**	
			Artificial sweetners(Singly)		
			1)Asparatame	**1)700ppm max**	**DGHS**
			2)Acesulphame K	**2)300 ppm max**	**DGHS**
			3) Sucralose	**3)300 ppm max**	**DGHS**
			4)Saccharin Sodium	**4) 100 ppm max**	**DGHS**
			Benzoic acid	**120 ppm**	**DGHS**
			Heavy Metal:		
			Lead, mg/kg	**2.5 ppm**	**AAS/AOAC 18th Ed. 975.03**
			copper, mg/kg	**30 ppm**	**AAS/AOAC 18th Ed. 975.03**
			Arsenic, mg/kg	**1.1 ppm**	**IS 2088 – 1983**
			Zinc, mg/kg	**5 ppm max**	**AAS/AOAC 18th Ed. 975.03**
			Total Plate Count, cfu/ml	**Not more than 50 cfu/ ml**	**USFDA BAM/APHA/IS 5402 : 2002**
			Coliform count/gm	**Absent in 100 ml**	**USFDA BAM/APHA/IS 5402 : 2002**
			Yeast and mould count	**Not more than 2.0 cfu / ml**	**USFDA BAM/APHA/IS 5403 : 1991**
			Afflatoxin	**30 ppm MAX**	**ELISA (J.European Food Research Tech; 210; 213-215; 2000) /AOAC 18th edition Chap.49**
31	**Dehydrated Fruits & Vegetables products**				
		Onion Seasoning powder	**Moisture**	**5.0 % Max by weight**	**DGHS MANUAL/AOAC (934.06)**
			Total ash on dry basis	**5.0 % Max by weight**	**DGHS MANUAL**

		Standrads as per FSSAI for onion powder	Ash insoluble in dil HCl	0.5 % Max by weight	IS:5403-1999/IS 13846-1993
			Peroxidase	Negative	IS 1797:1985(Reaff.2001)
			Total Plate Count, cfu/ml	< 40,000/ gm	IS 1797:1985(Reaff.2001)
			Sulphur dioxide	2000 ppm max	DGHS MANUAL
			Heavy metals		
			Lead	10 ppm on dry matter	DGHS MANUAL/
			Arsenic	2.0 ppm max	DGHS MANUAL/
32	Processed Vegetables				
		Olives in Brine	Sodium Chloride in Brine (hermetically sealed container)	5.0 % min	IS 2860-1995
		Standrads as per FSSAI for table olive	Sodium Chloride in Brine (non hermetically sealed container)	6.0 % min	IS 2860-1995
			Test for Added colour	Absent	DGHS MANUAL
			pH for Brine (in hermetically sealed container)	4.0 % max	DGHS MANUAL
			pH for Brine (in non hhermetically sealed container)	4.5 % max	DGHS MANUAL
			Acidity of Brine as lactic acid (Brine wih natural lactic fermentatin)	0.4 % min	DGHS MANUAL
			damaged matter	2.0 % Max	DGHS MANUAL
			Foreign matter	Not more than 1 unit/ kg	DGHS MANUAL
			Insect damaged unit	2.0 % Max	DGHS MANUAL
			Acidifing agents		
			Citric Acid	15 gm/Kg max	DGHS MANUAL
			L Tartaric acid	15 gm/Kg max	DGHS MANUAL
			Lactic acid	15 gm/Kg max	DGHS MANUAL
			Antioxidants		
			L- ascorbic acid	0.2 gm/Kg max	DGHS MANUAL
			Preservatives		
			1) Sulphor Dioxide,Sodium/Pottassium/Calcium Sulphide/bisulphide metasulphite expressed as SO_2	1.5 gm/Kg max only SO2	Visual Examination

			Benzoic acid/sodium/potassium Benzoate expressed as Benzoic acid	**1 gm/Kg max**	**DGHS MANUAL**
			Ferrous gluconate	**0.15 gm/Kg max of total iron**	**DGHS MANUAL**
			Ferrous lactate	**0.15 gm/Kg max of total iron**	**DGHS MANUAL**
			Mono sodium glutamate	**5 gm/Kg max**	**DGHS MANUAL**
			Sodium Alginate	**5 gm/Kg max**	**Magnetic Examination**
			xanthan gum	**3 gm/Kg max**	**Visual Examination**
			Calcium chloride	**1 gm/Kg max as calcium ions in stuffed end products**	**DGHS MANUAL**
33	**Flavouring agents**				
		Flavour granules	**Physical Examination**		**DGHS MANUAL**
			Insect Fragments		
			Damaged/Discoloured unit		
			Moisture		
			Insectdamaged matter		
			Iron filling		
			Rodent hair &Excreta		
			Solubility		
34	**Cereals & cereal products**				
		Wheat flour	**Moisture**	**NMT 14%**	**DGHS MANUAL/IS 1009 - 1994**
			Total ash		**DGHS MANUAL/IS 1009 - 1994**
			ash insoluble in HCL	**NMT 1%**	**DGHS MANUAL/IS 1009 - 1994**
			Gluten on dry basis	**NMT 0.1%**	**DGHS MANUAL/IS 1009 - 1994**
			Alcoholic acidity (as H_2SO_4)	**NLT 7.5%**	**DGHS MANUAL/IS 1009 - 1994/IS: 1009 – 1979 & AACC 10th Edn. 38 - 10**
			Rodent hair & Excreta	**NMT 1.2%**	**DGHS MANUAL**
			Improver	**absent in 25 gm**	**IS:4333 (P-2)-2002**
			1)Benzoyl paroxide	**1)NMT 40 ppm**	**USDFA BAM**
			2)Potassium Bromate	**2)NMT 20 ppm**	**DGHS MANUAL**
			3)Ascorbic Acid	**3) NMT 200 ppm**	**DGHS MANUAL**
			Fungal /Mould Growth		**DGHS MANUAL**
			Insect Infestation	**Absent**	**DGHS MANUAL**
			Rodent hair &Excreta	**Absent**	**DGHS MANUAL**

		Papad	Moisture		IS 2639-1999
		(proprietary product)	**Added colouring matter**	**Nil**	**DGHS MANUAL**
			Preservative	as per label declaration	
			Aflatoxin	**NMT 30 ppn**	**AOAC 18th edition Chap.49**
			Fat	**as per label declaration**	
35	**Culiminary pastes & other sauces(other than tomato and soya)**				
		Other sauces	**TSS Salt free basis (m/m)**		**DGHS MANUAL**
			1) Chilli Sauce	**NLT 8%**	
			2) Fruit/Vegetable Sauce	**NLT 15%**	
			3) Culinary paste/Sauce	**NLT 8%**	
			4) Ginger paste	**NLT 3%**	
			Acidity % (as acetic acid)		**DGHS MANUAL**
			1) Chilli Sauce	**NLT 1%**	
			2) Fruit/Vegetable Sauce	**NLT 1.2%**	
			3) Culinary paste/Sauce	**NLT 1%**	
			4) Ginger paste	**NLT 1%**	
				1)2% Max	
			Added colour	**absent**	**DGHS MANUAL**
			Preservatives		
			Benzoic acid	750 ppm	DGHS/AOAC 994.11
			1)Lead	**1) NMT 2.5 ppm**	**AOAC 18th Ed. 975.03**
			2)Copper	**2)NMT 30 ppm**	**AOAC 18th Ed. 975.03**
			3)Arsenic	**3)1.1PPM**	**IS 2088 – 1983**
			4)Tin	**4)NMT 250 ppm**	AOAC 18th Edn. 2005, 985.16, 980.19
			5)Zinc	**5)NMT 50 ppm**	**AAS/AOAC 18th Ed. 975.03**
			6)Cadmium	**6)NMT 1.5 ppm**	**AAS/AOAC 18th Ed. 975.03**
			7) Mercury	**7) NMT 1ppm**	**AOAC 18th Ed., 977.15**
			Yeast and mould count	**positive in not more than 100 counts/ gm**	APHA METHOD
36	**Carbonated Beverages/sweatned carbonated beverages**				
		Sweetened Carbonated Beverage	Caffeine	**145 ppm max**	JAOAC Vol 71, 5, 1988, p-934-937

		Standrads as per FSSAI	Estergum	**100 ppm max**	**DGHS MANUAL**
			Quinine salts as quinine sulphate	**100 ppm max**	**DGHS MANUAL**
			Artificial sweetners(Singly)		
			1)Asparatame	**1)700ppm max**	JAOAC Vol 71, 5, 1988, p-934-937
			2)Acesulphame K	**2)300 ppm max**	JAOAC Vol 71, 5, 1988, p-934-937
			3) Sucralose	**3)300 ppm max**	**DGHS MANUAL**
			4)Saccharin Sodium	**4) 100 ppm max**	JAOAC Vol 71, 5, 1988, p-934-937
			Benzoic acid	**120 ppm**	AOAC, 18th Edn. 2005, 994.11
			Lead, mg/kg	**10 ppm**	AOAC 999.11 - 2000
			Copper, mg/kg	**30 ppb Max**	IS:3752:1988
			Arsenic, mg/kg	**1.1 ppm Max**	**IS 2088 – 1983**
			Zinc, mg/kg	**5 ppm Max**	AOAC-986.15
			Total Plate Count, cfu/ml	**Not more than 50 cfu/ ml**	APHA METHOD
			Coliform count/gm	**Absent in 100 ml**	APHA METHOD
			Yeast and mould count	**Not more than 2.0 cfu / ml**	APHA METHOD
37	**Seasoning powder**				
		Dried Ginger powder	**Extraneous matter,% by mass**	**Absent**	**Visual Examination/USFDA Technical Bulletin No: 5 Macro Analytical Procedures Manual, Chapter: 5**
		Standrads as per FSSAI for Mixed Masala	**Moisture**	**NMT 12%**	**DGHS MANUAL**
			Total ash (on dry basis), % by mass		
			i)Unbleached	**8% max**	**DGHS MANUAL**
			ii)Bleached	**12% max**	**DGHS MANUAL**
			Calcium as calcium oxide (on dry basis),% by mass		
			i)Unbleached	**1.1 % max**	**DGHS MANUAL**
			ii)Bleached	**2.5 % max**	**DGHS MANUAL**
			Volatile oil, (on dry basis) % vol/wt	**1.5% min**	**DGHS MANUAL**
			Water soluble ash on dry basis	**1.7% min**	**DGHS MANUAL**
			Acid insoluble ash on dry basis	**1% max**	**DGHS MANUAL**
			Alcohol(90%v/w) soluble extract on dry basis	**5.1% min**	**DGHS MANUAL**
			Cold water soluble axtract on dry basis	**11.4% min**	**DGHS MANUAL**

			Added colouring matter	**Absent**	**DGHS MANUAL**
			Total plate count	**40,000 /gm max**	**APHA METHOD**
			Salmonella	**absent in 25 gm**	**APHA METHOD**
			Afflatoxin	**30 ppb max**	**ELISA (J.European Food Research Tech; 210; 213-215; 2000) /AOAC 18th edition Chap.49**
			Mould	**Absent**	**APHA METHOD**

** *Kindly note: 1. As discussed in meeting, group of Veterinary drugs for testing in Meat and Meat products yet to be decided. 2. Table 2 in APPENDIX B of FSSAI regulations dealing with MIcrobiological parameters of Milk and Milk products mention the microbiological limits at production stage by the industry. Therefore as in FSSAI, regulations no defined limits are written for Microbiological analysis of Milk and Milk Products so the parameters and limits written for Cheese samples are those as were followed under PFA, act .*

		Manuls/Methods of analysis	**Important links**	**Department**
		DGHS Manual	http://www.mohfw.nic.in	**Directorate General of Health Services, Ministry of Health & Family Welfare-**
		AOAC methods	www.aoac.org	**Association of Official Analytical Chemists**
		BIS Methods	www.bis.org.in	**BUREAU OF INDIAN STANDARDS**
		APHA methods	www.apha.org/	**American Public Health Association**