### F. No. STD/SP-18/MISC/2022

### Food Safety and Standards Authority of India (A statutory Authority under the Ministry of Health and Family Welfare, Govt. of India)

FDA Bhawan, Kotla Road, New Delhi-110002

The # th July, 2023

**Subject:** Direction under Section 16(5) of *Food Safety and Standards Act, 2006* regarding extension of time-period for the compliance of Recommended Dietary Allowance (RDA) 2020

Reference is drawn to the directions dated  $16^{th}$  July, 2021 and  $02^{nd}$  August, 2021 issued vide F No. Stds/SP-05/Orders/FSSAI regarding Recommended Dietary Allowance (RDA), wherein it was decided that the RDA 2020 shall come into force from 1st July 2023 for compliance.

- 2. Representations have been received from industry associations seeking extension for the implementation of Recommended Dietary Allowance (RDA 2020), owing to challenges faced in reformulation of products and inventory of old packaging materials lying with FBOs.
- 3. After due consideration, it has been decided to further extend the date of coming into force of Recommended Dietary Allowance 2020 (RDA 2020) for compliance for a period of six months from 01st July 2023.
- 4. This issues with the approval of the Competent Authority in exercise of the power vested under Sections 16(5) of *Food safety and Standards Act, 2006*.

(Dr. Amit Sharma)
Director
Regulation Division
FSSAI, HQ
New Delhi

Encls:

i. Direction dated 16<sup>th</sup> July, 2021

ii. Direction dated 02nd August, 2021

To:

1. All Food Safety Commissioners

2. All Central Designated Officers, FSSAI

3. All Authorized Officers, FSSAI

4. CITO (for uploading on FSSAI website)

Copy for information to:

- 1. PPS to Chairperson, FSSAI
- 2. PPS to CEO, FSSAI
- 3. All Directors, FSSAI

F. No. Stds/SP-05/Orders/FSSAI

### Food Safety and Standards Authority of India

(A Statutory Authority established under the Food Safety & Standards Act, 2006) (Science & Standards Division)

FDA Bhawan, Kotla Road, New Delhi-110 002

Dated, the 16 July, 2021

Subject: Direction under Section 16 (5) of Food Safety and Standards Act, 2006 regarding Recommended Dietary Allowances (RDA).

Reference is drawn to the order dated 07.01.2020 issued vide F. No. Stds/Nutra (DCGI)/FSSAI-2017 regarding Recommended Dietary Allowance (RDA) wherein the RDA values for vitamins, minerals and amino acids are specified (hereinafter referred to as RDA 2010).

- 2. Whereas, the ICMR has revised the nutrient requirements for Indians and has published new RDAs in 2020 and the Food Authority has decided to adopt the same. A collated document (hereinafter referred to us RDA 2020) in respect of the new RDA values for vitamins, minerals and amino acids is enclosed as Annexure I and II for reference and compliance.
- 3. The RDA 2020 shall come into force from 1<sup>st</sup> July, 2023 for compliance. Till such time, Food Businesses may comply with RDA 2010 or RDA 2020. However, from 1<sup>st</sup> July, 2023, onwards only RDA 2020 as per para 2 above shall be in force and compliable by Food Businesses.
- 4. Further, it is also clarified that the report submitted by ICMR regarding 'Tolerable Upper Limits (TUL) of vitamins/minerals' which has been made available to the public on the FSSAI website on 05.09.2018 is 'ONLY FOR INFORMATION' and NOT for use by the Food Businesses.
- 5. This order supersedes the order dated 07.01.2020 and is issued with the approval of Competent Authority in exercise of the power vested with Food Authority under Section 16(5) of Food Safety and Standards Act, 2006.

(Bhaskar N)
Advisor (Science & Standards)
FSSAI, New Delhi.

Encls:

Annexure IA: ICMR RDA 2020 values for nutrients expect amino acids

ii. Annexure IB: Collated information on RDA for nutrients not listed under Annexure IA

iii. Annexure II: ICMR RDA 2020 values for amino acids

### To

- 1. All Food Safety Commissioners
- 2. All Authorized Officers, FSSAI
- 3. All Designated Officers, FSSAI

### Copy to

- 1. PPS to Chairperson, FSSAI, New Delhi.
- 2. Sr. PS to CEO, FSSAI, New Delhi.
- 3. CITO, FSSAI for necessary action and uploading on FSSAI website.

### SUMMARY OF RDA FOR INDIANS - 2020

| A              | Granp           |     |           | Men      |       |           |          |          |  | Wemen                   |              |                |                    |           | Infants          |        | Children | -    | Danie     |        | 1 110  | Carle Carle | Ponts  | Siele<br>Siele |
|----------------|-----------------|-----|-----------|----------|-------|-----------|----------|----------|--|-------------------------|--------------|----------------|--------------------|-----------|------------------|--------|----------|------|-----------|--------|--------|-------------|--------|----------------|
| Category       | of work         | -   | Sedentary | Moderate | Lenvy | Sedentary | Mederate | Hearn    |  | Weinan<br>Weinan        |              | Lactation 0-6n | 7.13m              | * D-6 E * | 6-12m            | 1 9:   | 4.65     | 100  | W 10, 15. | 10.17% | 13 150 | 17.15       | 16.18v | 16-18v         |
| Body           | (F)             |     | 1         | 6        |       |           | 1,5      |          | 55   | + 9                     | *****        |                | ****************** | 5.8       | 8,5              | 1.1    | 18.3     | 28.2 | O FC      | 26.4   | 202    | 9 67        | E FF   | 55.7           |
| Pretein        | (p/5)           |     | 0         | T.       |       |           | 45.7     |          | 19.5<br>19.5<br>19.5<br>19.5<br>19.5<br>19.5<br>19.5<br>19.5 | 1,220<br>1,220<br>1,021 | trimester)   | 691=           | +13.2              | 00        | 10.5             | 113    | 0.51     | 5.57 | 21.8      | 302    | O FF   | 43.2        | 45.d   | 46.2           |
| CEIO           | (g/d)           | -   | 04.5      | 3        |       |           | 130      |          |  | 173                     | A THE PERSON | 200            | 200                | 8         | 26               | 7.10.1 | 130      | 130  | 170       | 130    | 170    | 130         | 130    | 130            |
| Gentle Gentle  | ) (iii)         | 1   | ,000      | 1891     |       |           | 1000     |          |  | 1000                    |              | 1000           |                    | 300       | 300              | 500    | 550      | 650  | 850       | 850    | GCO.   | GOO!        | 1050   | 1050           |
| Magae          | (m)             | 3   | 200       | 200      |       |           | 325      | -        |  | 385                     |              | 3135           |                    | 30        | 7.5              | 135    | 155      | 215  | 270       | 255    | 1 552  | 325         | 405    | 335            |
| пш             | 9.0             |     | Ġ.        | 1        |       |           | 29       |          |  | \$                      | (m)          |                | ì                  |           | t <sub>e</sub> U | CZ.    | 11       | 1.5  | 91        | 38     | 22     | 30          | - 26   | 32             |
| Хіпс           | Su)             |     | t         | , -      | -     |           | 13.2     |          |  | 14.5                    |              | 7              |                    |           | 2.5              | 3.0    | 4.5      | 5.9  | 50.00     | 500    | 143    | 12.8        | 17.6   | 14.2           |
| Lodine         | (pt.g)<br>(cap) |     | 9.        | 2        |       |           | 150      |          |  | 250                     |              | 280            |                    | 100       | 130              | 06     | 120      | 120  | 150       | 150    | 150    | 150         | 150    | 150            |
| Thiamine       | ğui)            | * - | 10        | 200      | 4.3   | et.       | 1.7      | 2.2      |  | 200                     |              | 27             | 7.1                | 0.2       | 0.4              | 7:0:   | 670      | 1.1  | 1.5       | 1.4    | 1.9    | 1.6         | 2.2    | 1.7            |
| Kibo<br>flavin | (D/             | 00  | 250       | 0.0      | 3.4   | 1.9       | 2.4      | 3.1      |  | 72                      |              | 3.0            | 2.0                | 6.4       | 0.6              | 6.0    | 13       | 1.6  | 2.1       | 19     | 2.7    | 2.2         | 3.1    | 2.3            |
| Niacin         | (D)             | FI  | 0.        | 00       | 3     | 1.1       | 14       | 22       |  | G.                      |              | ev.<br>+       | 7                  | ri        | S                | í-     | 6        | 11   | 13        | 17     | 19     | 16          | 22     | 17             |
| 734<br>286     | (mg/<br>d)      | 0   | 7.4       | 1 6      | 2.5   | 1.9       | 1.9      | ti<br>ci |  | 7                       |              | +0.26          | +0.17              | 0.1       | 9.0              | 6.0    | 12       | 5    | 2.0       | 1.9    | 2.6    | 2.2         | 3.0    | 2.3            |
| Felate         | (a)             |     | 390       |          | -     |           | 220      |          | i<br>i   | 8,                      |              | 330            | 330                | 25        | 853              | 110    | 135      | 170  | 220       | 22.5   | 285    | 245         | 348    | 270            |
| Vat            | (p.g/           |     | 2.5       |          |       |           | 2.5      |          | 4  | 9                       |              | 01+            |                    | 2]        | 1.3              | 1.2    | 177      | 2.5  | 2.5       | 2.5    | 2.5    | 2.5         | 23     | 2.5            |
| THE C          | (p (d)          |     | 30        |          | 1     |           | 9        |          |  | G<br>F                  |              | +50            |                    | 25        | 77               | 27     | 2        | 中    | Sel       | . 25   | 7.5    | 999         | 62     | 88             |
| MI &           | ) 中             |     | 1000      |          |       | 1         | 840      | -        | 000  | 256                     | 1            | 950            |                    | 350       | 350              | 390    | 510      | 630  | 770       | 290    | 930    | 268         | 10001  | 860            |
| 15 D           | (E)             |     | 009       |          | I     |           | 000      |          | 90%  | i i                     | T            | 009            |                    | 400       | 100              |        | 009      |      | 009       | 009    | 009    | 009         | 000    |                |

[Ref. Recommended dietary allowances and estimated average requirements; nutrient requirements for Indians - 2020]

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## SUMMARY OF RECOMMENDED INTAKES FOR OTHER MINERALS AND TRACE ELEMENTS

| SNo. | Minerals/Trace Element | Recommended intake |
|------|------------------------|--------------------|
| -    | Phosphorous            | 1000 mg/day        |
| 01   | Sodium                 | 2000 mg/day        |
| m    | Potassium              | - 3500 mg/day      |
| 7d*  | Coppor                 | 2 mg/day           |
| 20   | Manganese              | 4 mg/day           |
| 9    | Chronium               | 50 µg/day          |
| t-   | Selenium               | 40 µg/day          |

[Ref. Recommended dietary allowances and estimated average requirements; outrient requirements for indians - 2026]



### Collated information on RDA for nutrients not listed under Annexure IA

| S.<br>No. | Vitamin             | RDA per day            |
|-----------|---------------------|------------------------|
| 1.        | Vitamin E*          | 7.5-10 mg a-tocopherol |
| 2.        | Vitamin K* (K1, K2) | 55 μg                  |
| 3.        | Biotin**            | 30 µg                  |
| 4.        | Pantothenic acid**  | 5 mg                   |

| S. No. | Mineral       | RDA per day   |
|--------|---------------|---|
| 1.     | Chloride#(AI) | <ul> <li>Children 1 to 3 y: 1500 mg</li> <li>Children 4 to 8 y: 1900 mg</li> <li>Men &amp; Women (9 y and above): 1800 to 2300 mg</li> <li>Pregnant &amp; Lactating women: 2300 mg</li> </ul> |
| 2.     | Molybdenum**  | 45 μg   |

[\*ICMR (Recommended dietary allowances and estimated average requirements: nutrient requirements for Indians - 2020); \*\*Codex (CAC/G), 2-1985- Guidelines on nutrition labelling (applied only for individuals older than 36 months)); #Food and Nutrition Board, Institute of Medicine, National Academies; Al. Adequate Intake]

Note 1: In case age wise RDAs are available, then RDA values for men and women (sedentary work) may be considered as standard reference or else the single value will be applicable across all age groups.

Note 2: The FSS (Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Food and Novel Food) Regulations, 2016 shall not be applicable to the infants up to the age of 24 months. Hence, RDAs mentioned in this document for the age group 0 to 24 months will not be applicable for the said regulations.

Note 3: Conversion units (referred from report of Expert Committee of ICMR which specifies TUL of micronutrient for Indian population)

- Vitamin Λ: 1μg = 3.33 IU
- Vitamin D: 1μg = 40 IU.
- Vitamin E: 1mg = 1.5 IU d-alpha-tocopherol, or 1.1 IU dl-alpha-tocopherol
- Folic acid: 1µg = 1.7 DFE (Dietary Folate Equivalent)

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### RDA values for amino acids for age group more than 24 months (2 years)

| Vo.       |                          | wt./day) |
|-----------|--------------------------|----------|
| (i)       | Histidine                | 10       |
| (ii)      | Isoleucine               | 20       |
| (iii)     | Leucine                  | 39       |
| (iv)      | Lysine                   | 30       |
| (v)       | Methionine               | 10       |
| (iv)      | Cysteine                 | 4        |
| (vii)     | Methionine + Cysteine    | 15       |
| (viii)    | Threonine                | 15.      |
| (ix)      | Phenylalanine + Tyrosine | 25       |
| (x)       | Tryptophan               | 4        |
| (xi)      | Valine                   | 26       |
| x)<br>xi) | Tryptophan               | 26       |

F. No. Stds/SP-05/Orders/FSSAI

Food Safety and Standards Authority of India

(A Statutory Authority established under the Food Safety & Standards Act, 2006)

(Science & Standards Division)

FDA Bhawan, Kotla Road, New Delhi-110 002

Dated, the 2 August, 2021

Subject: Direction under Section 16 (5) of Food Safety and Standards Act, 2006 regarding Recommended Dictary Allowances (RDA).

In partial modification of the direction of even number dated 16<sup>th</sup> July, 2021 on subject cited above, the Annexure I of the said direction is revised based on revision of RDA 2020 by ICMR-NIN. The revised Annexure I is enclosed for reference and compliance.

This issues with the approval of Competent Authority in exercise of the power vested with Food Authority under Section 16(5) of Food Safety and Standards Act, 2006.

(Bhaskar N) Advisor (Science & Standards) FSSAI, New Delhi.

### Encls:

- i. Annexure IA: ICMR RDA 2020 values for nutrients expect amino acids
- ii. Annexure IB: Collated information on RDA for nutrients not listed under Annexure LA

### To

- 1. All Food Safety Commissioners
- 2. All Authorized Officers, FSSAI
- 3. All Designated Officers, FSSAI

### Copy to

- 1. PPS to Chairperson, FSSAI, New Delhi.
- 2. Sr. PS to CEO, FSSAI, New Delhi.
- 3. CITO, FSSAI for necessary action and uploading on FSSAI website.

# SUMMARY OF RDA FOR INDIANS - ICMR- NIN, 2020

|             |              |                   |          |        |          |       |     |             |           | 1         |            | 10.000 | 1     |           |       |         |       |      |              |      |        |        |        | T        | 7      | 4      | 2      |
|-------------|--------------|-------------------|----------|--------|----------|-------|-----|-------------|-----------|-----------|------------|--------|-------|-----------|-------|---------|-------|------|--------------|------|--------|--------|--------|----------|--------|--------|--------|
| ij, o       | (tr/, q)     | 909               |          | (909)  |          |       |     | 009         |           |           | Cho        | 000    |       | 400       |       | 400     |       | 009  |              | 600  | 009    | 009    | 000    | 200      | 000    | 000    | 1      |
| Vit         | 96           | 1000              |          | 840    |          |       |     | 906         |           |           | 0.00       | 000    |       | 1350      | 1     | 350     | 390   | 510  | 630          | 011  | 062    | 930    | 500    | 070      | 1000   | 860    |        |
| N C         | (mg/         | 80                |          | 59     |          |       |     | +[5         |           |           |            | 99     |       | 30        | 3     | 30      | 30    | 50   | 100          | 55   | 900    | 20     | 27     | 6        | 68     | 202    |        |
| V.it<br>B12 | (p/Stl)      | 51                |          | 2.2    |          |       |     | +0.25       |           |           |            | 5      |       |           | 1     | 17      |       | 0.0  | ci           | 2.0  | 0.0    | 0      | 100    | 7.7      | 2.2    | 2.2    |        |
| Folate      | (D/STI)      | 300               |          | 22.0   |          |       |     | 570         |           |           |            | 326    |       |           | 3     | 355     | 120   | 135  | 120          | 1000 | 77.5   | 1000   | 100    | 777      | 340    | 270    |        |
| Vit.<br>B6  | (p/gm)       | 0.1<br>0.1<br>4.0 | 3.1      | 67     | 2.4      |       |     | n           |           |           | +0.26      |        | +0.13 |           |       | 0.6     | 0.0   | 1.3  | ! "          | 200  | 1.0    | 20     | 0.5    | 2.2      | 3.0    | 2.3    |        |
| Macin       | (p/ām)       | vt o              | 23       | = =    | 30       |       |     | 6+          |           |           |            | Ŷ      |       |           | ru .  | 10      | 1     | 0    | \            | · M  | 2 2    | + .    | 17     | 16       | 22     | 17     |        |
| Ribo        | (D/Sm)       | 2.0               | 3.2      | 6)     | 3.1      |       |     | 2.7         |           |           | C et       | 3      | o ci  |           | ±.0   | 0.6     | 1.1   | 7    | 7 7          |      | 71     | 7      | 2.7    | ei<br>ei | 3.1    | 2.3    |        |
| Thiamine    | (D/gm)       | ± 0<br>           | 2.5      | 4      | 2.2      |       |     | 2.0         |           |           |            | 10     | i     |           | 0.2   | 10      | 1     | \ 0  | λ -<br>2 -   | -    | 3      | 51     | 5]     | 1.6      | 00     | 1.7    |        |
| Fodine      | (50)         | Carry S           | 7        |        | 3        |       |     | 220         |           |           |            | 280    |       |           | 100   | 130     |       | 2 :  | 3, 3         | 066  | 100    | 100    | 140    | UTI      | 140    | TAK!   | 71.7   |
| Zine        | (p/Zm)       |                   | /+       |        | 13.2     |       |     | 6.41        |           |           |            | 14.1   |       |           | ,     | 6       |       | <br> | 4.5          | 5.9  | 8.5    | 8.5    | 14.3   | S C1     | 7 -1   | 0.71   | 1.1.1  |
| Lron        | (P //em)     |                   | 19       |        | 53       |       |     | 77          | ī         |           |            | 23     | 1     |           | 1     |         | 0     | 60   | I            | 15   | 1.6    | 28     | 22     | 00       | 200    | 07     | 3.2    |
| Magnes      | (E) e(C)     | à                 | 440      |        | 370      |       |     | 4.40        | 1         |           |            | 400    | Š     |           | 30    | Ÿ       | 22    | 06   | 125          | 175  | 240    | 250    | 345    | 977      | 2+0    | 4+0    | 380    |
|             | ,iām)        | (p)               | 1000     |        | 1000     |       |     | 1000        | 1000      |           |            | 1,500  | 20-1  |           | 300   |         | 200   | 200  | 550          | 920  | 850    | 850    | 1,000  | 1000     | 1000   | 1920   | 1050   |
| Dietary     |              | 30                | 9        | 25.52  | 30       | 7     |     |             | •         |           |            |        |       |           |       |         |       | 1.5  | 20           | 26   | 33     | 30     | - 13   | 4        | 36     | 50     | 00     |
| Protein     |              | 3,0               | 54.0     |        | 76.0     | 2.07  | 3.0 | trimester)  | +22.0     | FC)       | trimester) | +17.0  |       | +13.0     | 8.0   |         | 10.5  | 12.5 | 16.0         | 23.6 | 32.0   | 43.0   | 0 0    | 45.0     | 43.0   | 55.0   | 46.0   |
| Body        |              | (kg)              | 65       |        | <b>%</b> |       |     | 22          | + .       | 10        |            |        |       | 100       | 0 1   | 2       | 10.00 | 120  | 1 00         | 27.2 | OFC.   | PYS    | 100    | 503      | 9.65   | 54,43  | 55.7   |
|             | of work      | Sedentary         | Moderate | Fieavy | Moderate | Heavy |     | Designatist | THE SHAME | VCVM3EA-4 | Landahan   | O-form |       | 7-12m · · | 4 C C | m ozo   | 6-12m | 1.50 | 4.60         |      | 00 13. | 10.10. | 177-01 | 13-15y   | 13-15y | 16-18v | 16-18y |
|             | Age<br>Group |                   | Men      |        |          |       |     |             | Women     |           |            |        |       |           |       | Infants |       |      | ("In Il Anon |      |        |        |        | P(s)     |        | Boys   | Silks  |

\* Adequate Intake (AI)

Note: For adequate intake of Biotin and Pantothenic acid, refer to the text on summary of recommendations.

Collated information on RDA for nutrients not listed under Annexure IA

| S.<br>No. | Vitamin                | RDA per day   |
|-----------|------------------------|---|
| 1.        | Vitamin E*             | 7.5-10 mg tocopherol  |
| 2.        | Vitamin K* (K1, K2)    | 55 μg   |
| 3.        | Biotin* (AI)           | <ul> <li>Adults and pregnant women: 40 μg</li> <li>Lactating women: 45 μg</li> <li>Adolescents: 35 μg</li> <li>Children 4 – 10 y: 25 μg</li> <li>Children 1 – 3 y: 20 μg</li> </ul> |
| 4.        | Pantothenic acid* (AJ) | <ul> <li>Adults and pregnant women: 5 mg</li> <li>Lactating women: 7 mg</li> <li>Adolescents: 5 mg</li> <li>Children: 4 mg</li> </ul>   |

| S. No. | Mineral                    | RDA per day   |
|--------|----------------------------|---|
| 1.     | Phosphorous*               | 1000 mg   |
| 2.     | Sodium*                    | 2000 mg   |
| 3.     | Potassium*                 | 3500 mg   |
| 4.     | Copper*                    | 1.7 mg  |
| 5.     | Manganese*                 | 4 mg  |
| 6.     | Chromium*                  | 50 μg   |
| 7.     | Selenium*                  | 40 µg   |
| 8.     | Chloride <sup>#</sup> (AI) | <ul> <li>Children 1 to 3 y: 1500 mg</li> <li>Children 4 to 8 y: 1900 mg</li> <li>Men &amp; Women (9 y and above): 1800 to 2300 mg</li> <li>Pregnant &amp; Lactating women: 2300 mg</li> </ul> |
| 9.     | Molybdenum**               | 45 μg   |

[\*ICMR (Recommended dietary allowances and estimated average requirements; nutrient requirements for Indians - 2020); \*\*Codex (CAC/GL 2-1985- Guidelines on nutrition labelling (applied only for individuals older than 36 months)); #Food and Nutrition Board, Institute of Medicine, National Academics; Al: Adequate Intake]

Note 1: In case age wise RDAs are available, then RDA values for men and women (sedentary work) may be considered as standard reference or else the single value will be applicable across all age groups.

Note 2: The FSS (Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Food and Novel Food) Regulations, 2016 shall not be applicable to the infants up to the age of 24 months. Hence, RDAs mentioned in this document for the age group 0 to 24 months will not be applicable for the said regulations.

Note 3: Conversion units (referred from report of Expert Committee of ICMR which specifies TUL of micronutrient for Indian population)

- Vitamin A: 1 μg = 3.33 IU
- Vitamin D: 1μg = 40 IU
- Vitamin E: 1mg = 1.5 IU d-alpha-tocopherol, or 1.1 IU dl-alpha-tocopherol
- Folic acid: 1ng = 1.7 DFE (Dietary Folate Equivalent)

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