

Medicine and Health Sciences EzoNyango nezeeNzululwazi kwezeMpilo Geneeskunde en Gesondheidswetenskappe

# **NUTRIENTS**

# Vitamins: Riboflavin

# What is it?

Riboflavin is a water-soluble B-vitamin, also known as vitamin B2.

# Functions - what does it do?

Riboflavin is an integral component of the coenzymes that participate in many energy-yielding metabolic pathways. They promote the first steps in the metabolism (breakdown and production) of glucose and of fatty acids. The metabolism of some vitamins and minerals also require riboflavin.

# Requirements - How much do we need?

	Recommended Dietary Allowance* (mg/day)		
Life-Stage (years)	Males	Females	
0 - 0.5 (0 - 6 months)	0.3#	0.3#	
0.5 - 1 (7 - 12 months)	0.4#	0.4#	
1 - 3	0.5	0.5	
4 - 8	0.6	0.6	
9 - 13	0.9	0.9	
14 - 18	1.3	1.1	
Ages 19+	1.3	1.1	
Life-Stage (years)	Pregnancy	Lactation	
18 and younger	1.4	1.6	
19 - 30	1.4	1.6	
Ages 31 - 50	1.4	1.6	

\*The Recommended Dietary Allowance (RDA) is the average daily dietary intake level that is sufficient to meet the nutrient requirements of nearly all (97-98%) healthy individuals in each life-stage and gender group.

#Adequate Intakes (AI) are used as no RDA is established. The AI is a recommended daily intake level based on observed or experimentally determined approximations of nutrient intake by a group of healthy people who are assumed to be maintaining an adequate nutritional state.

# Sources - Where is it found?

Riboflavin is widely distributed in small amounts in foods.

		Nutrient Density		
		High	Medium	Low
Good sources	Milk (fresh, canned, or dried), Cheddar cheese, Cottage cheese			
Other sources	Organ meats, Lean meats, Eggs, Green leafy vegetables, Enriched breads & cereals			

# Deficiency - When you have too little

Deficiency of riboflavin, when it occurs is usually in combination with deficiency of other water-soluble vitamins, such as thiamin, vitamin B6, and folate, and therefore may be difficult to identify.

Symptoms associated with riboflavin deficiency include the inflammation of the mouth and tongue, cracks or sores on the outsides of the lips (cheilosis) and at the corners of the mouth (angular stomatitis), dermatitis (inflammation of the skin), various eye disorders, sensitivity to the sun, and confusion.

# Toxicity - When you have too much

There is no known toxicity level for riboflavin.

	Upper Limit+ (mg/day)		
Life-Stage (years)	Males	Females	
All ages	ND	ND	
Life-Stage (years)	Pregnancy	Lactation	
All ages	ND	ND	

+Upper Limits (UL) = The maximum level of daily nutrient intake that is likely to pose no risk of adverse effects. Unless otherwise specified, the UL represents total intake from food, water, and supplements.

ND = Not determinable due to lack of data of adverse effects in this age group and concern with regard to lack of ability to handle excess amounts. Source of intake should be from food only to prevent high levels of intake.

# For further, personalized and more detailed information, please contact a dietitian registered with the Health Professions Council of South Africa.*References from the scientific literature used to compile this document are available on request.*

#### Human Nutrition | Menslike Voeding

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