

Ribonucleic Acid (RNA)

7225

Please Copy for Your Patients

Ribonucleic Acid (RNA) Derived From Yeast Also Contains Calcium Lactate, Magnesium Citrate, Cellulose, and Calcium Stearate

Ribonucleic acid (RNA) is a nucleic acid that is found in both the nucleus and the cytoplasm of cells in plants and animals. It transmits genetic instructions from the cell's nucleus to the cytoplasm. The RNA in the cytoplasm works to assemble proteins. RNA carries hereditary information that enables the body to transmit and maintain genetic coding so that when new cells form, they possess the identical structure and perform the same unique function as their parent cells. This same hereditary information can also be passed through generations via nucleic acids. Traditional Chinese medicine uses human placenta as the source for harvesting precious RNA. However, in the modern western culture, we get our supplemental RNA from dietary sources. One of the richest dietary sources of RNA is found in yeast. Nucleic acids contain the blueprint for cellular renewal and have been shown to slow down the aging process through their ability to reduce the effects of cellular damage caused by free oxygen radicals. The amount of RNA in the human body is depleted by lack of exercise, internal or external stress, exposure to pollutants, and poor diet. Adequate amounts of RNA in the body are essential to every aspect of good health and longevity.†

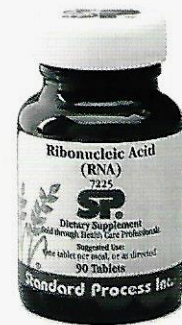
How Ribonucleic Acid Keeps You Healthy

Stimulates the immune system

RNA improves the activity of the T- and B-cells, the body's arsenal of fighting cells that support good health. It also plays a vital role in assisting the macrophage cells that are responsible for cleaning up cellular debris throughout the body.†

Regulates cellular characteristics

Almost all cellular renewal, growth, and repair falls under the direction of RNA and DNA. Insufficient amounts of RNA in the body can trigger premature aging through cellular degeneration. Supporting the body's ability to produce RNA and replenishing the supply of RNA through diet and supplements can help maintain overall health and well-being.†



Introduced in:

1952

Content:

90 Tablets

Supplement Facts:

Serving Size: 1 tablet
Servings per Container: 90

		%DV
Calories	1	
Calcium	15 mg	2%
Ribonucleic Acid	185 mg	

Ribonucleic Acid (RNA) 7225



800-558-8740 • www.standardprocess.com

† These statements have not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Ribonucleic Acid (RNA)

What Makes Ribonucleic Acid (RNA) Unique

Unique Product Attributes

Ribonucleic Acid (RNA) is a yeast extract

- Supports healthy cellular division, replication, and repair and, therefore, functions as a close relative of a Protomorphogen™ extract†

Unique Processing

Degreed microbiologists and chemists in our on-site laboratories constantly conduct bacterial and analytical tests on raw materials, product batches, and finished products

- Ensures consistent quality and safety

Vitamin and mineral analyses validate product content and specifications

- Assures high-quality essential nutrients are delivered

Whole Food Philosophy

Dr. Lee challenged common scientific beliefs by choosing a holistic approach of providing nutrients through whole foods. His goal was to provide nutrients as they are found in nature—in a whole food state where he believed their natural potency and efficacy would be realized. Dr. Lee believed that when nutrients remain intact and are not split from their natural associated synergists—known and unknown—bioactivity is markedly enhanced over synthetic nutrients. Following this philosophy, even a small amount of a whole food concentrate will offer enhanced nutritional support, compared to a synthetic or fractionated vitamin. Therefore, one should examine the source of nutrients rather than looking at the quantities of individual nutrients on product labels.

Each tablet supplies 185 mg ribonucleic acid.

Other Ingredients: Calcium lactate, magnesium citrate, cellulose, arabic gum, and calcium stearate.

Suggested Use: One tablet per meal, or as directed.

Sold to health care professionals.

Studies on nutrients generally use large doses and these studies, some of which are cited below, are the basis for much of the information we provide you in this publication about whole food ingredients. See the supplement facts for Ribonucleic Acid (RNA).

Anderson L.F. 1998. *Mosby's Medical, Nursing, & Allied Health Dictionary*. 5th ed. Mosby: St. Louis. 1427.
Azhar S., et al. Alteration of the adrenal antioxidant defense system during aging in rats. *Journal of Clinical Investigation*. Sep 1995; 96(3): 1414-1424.
Balch J.F., Balch P.A., 1997. *Prescription for Nutritional Healing*. 2nd ed. Avery Publishing Group: Garden City Park. 94.
Berdanier C.D. 1995. *Advanced Nutrition Micronutrients*. CRC Press: Boca Raton. 10-15, 122-23, 196-97.
Cerra F.B. *American Journal of Surgery*. Feb 1991; 161(2): 230-234.
Cerra F.B., et al. *Nutrition*. May-June 1991; 7(3): 193-199.
Coffee C.J. 1998. *Metabolism*. 1st ed. Fence Creek Publishing; Madison. 6-8, 188.
Culbertson M.R. *RNA surveillance*. Genetic Trends. Feb 1999; 15(2): 74-80.
Frank B. 1968. Psychological Library Publishers: New York.
Guyton A.C., Hall J.E. 1997. *Human Physiology and Mechanisms of Disease*. 6th ed. W.B. Saunders Company: Philadelphia. 22-30.
Hanachi P., et al. Characterization of the p33 subunit of eukaryotic translation initiation factor-3 from *Saccharomyces cerevisiae*. *Journal of Biological Chemistry*. Mar 26 1999; 274(13): 8546-8553.
Horbach G., et al. The influence of aging on the induction of the mRNAs of rat liver cytochromes P450IIB1 and P450IIB2. *Biochemical Pharmacology*. Aug 1 1990; 40(3): 529-533.
Jacob S.W., Francone C.A., Lossow W.J. 1982. *Structure and Function in Man*. 5th ed. W.B. Saunders Company: Philadelphia. 71.
Kirschmann J.D. 1979. *Nutrition Almanac*. Revised edition. McGraw-Hill Book Company: New York. 14.

Li R.K., Mitchell T.G. Induction of interleukin-6 mRNA in rat alveolar macrophages by in vitro exposure to both *Cryptococcus neoformans* and anti-*C. neoformans* antiserum. *J. Med. Vet. Mycol.* Sep-Oct 1997; 35(5): 327-334.
Moore P.A., et al. Yeast glycolytic mRNAs are differentially regulated. *Molecular Cell Biology*. Oct 1991; 11(10): 5330-5337.
Pitchford P. 1993. *Healing With Whole Foods*. Revised edition. North Atlantic Books: Berkeley.
Rao G., et al. Effect of dietary restriction on the age-dependent changes in the expression of antioxidant enzymes in rat liver. *Nutrition Journal*. Jun 1990; 120(6): 602-609.
Riga S., Riga D. *Annals of the New York Academy of Sciences*. Dec. 29 1995; 771: 535-550.
Senkal M., et al. *European Journal of Surgery*. Feb 1995; 161(2): 115-122.
Shils M.E., Young V.R. 1988. *Modern Nutrition in Health and Disease*. 7th ed. Lea & Febiger: Philadelphia. 618-628.
Tama K.T., et al. Yeast and mammalian metallothioneins functionally substitute for yeast copper-zinc superoxide dismutase. *Proc Natl Acad Sci USA*. Sep 1 1993; 90(17): 8013-8017.
Tver D.F., Russell P. 1989. *The Nutrition and Health Encyclopedia*. 2nd ed. Van Nostrand Reinhold: New York. 465.
Van Buren C.T. The role of nucleotides in adult nutrition. *Nutrition Journal*. Jan 1994; 124(1 Suppl): 160S-164S.
Van Wynsberghe D., Noback C.R., Carola R. 1995. *Human Anatomy and Physiology*. 3rd ed. McGraw-Hill, Inc.: New York. 50-51, 58-59, 84-85, 87.
Verdier J.M., et al. Preparation and characterization of yeast nuclear extracts for efficient RNA polymerase B (II)-dependent transcription in vitro. *Nucleic Acids Research*. Dec 11 1990; 18(23): 7033-7039.
Wagner H., et al. 1985. *Economic and Medicinal Plant Research*. Volume 1. Harcourt, Brace Jovanovich: London. 198, 204, 274.
Wilcoxon S.E., et al. Two forms of RPO41-dependent RNA polymerase. Regulation of the RNA polymerase by glucose repression may control yeast mitochondrial gene expression. *Journal of Biological Chemistry*. Sep 5 1988; 263(25): 12346-12351.