

MEDIA RELEASE • COMMUNIQUE AUX MEDIAS • MEDIENMITTEILUNG**Nutritional advance offers support for people with cancer**

Nyon, September 22, 2003 – Cancer patients experiencing weight loss may now benefit from Resource® Support™, a specialized nutritional product with a unique blend of key nutrients designed to help cancer patients gain weight in the form of muscle tissue and enhance immune function. Resource® Support™, a high-protein, high-energy nutritional supplement developed by Novartis Medical Nutrition, was officially presented today in Cannes, France, to coincide with the annual meeting of the European Society for Parenteral and Enteral Nutrition (ESPEN).

Resource® Support™ has been specifically designed to help improve patients' quality of life and improve their tolerance of cancer treatments such as surgery, radiotherapy and chemotherapy.

Data from the American Cancer Society suggest that 1.33 million new cases of cancer will be diagnosed in 2003. In men, cancers of the prostate, lung, colon and rectum, and urinary bladder will be diagnosed most often, whereas in women, cancers of the breast, lung, colon and rectum, and uterine will be diagnosed most often^[1].

Weight loss is common in patients with cancer, particularly those with solid tumors. Up to 20% of cancer patients are thought to die from the effects of malnutrition alone rather than from the direct effects of their disease^[2]. Even minor weight loss – as little as 5% – can affect the patient's response to therapy, lowering their chance of survival compared to patients who have not lost weight^[3]. Clearly, the sooner that cancer patients can be helped to maintain or regain a healthy weight, the better is their long-term outlook.

Weight loss may be the result of mechanical obstruction, treatment side-effects, pain or malabsorption, which are typically seen in patients with head and neck, esophageal and intestinal tumors. But it may also be the result of a complex range of metabolic abnormalities that result in cancer cachexia, a syndrome characterized by muscle loss and symptoms such as anorexia, asthenia, and weight loss, from both fat and lean tissue.

Patients begin to show changes in the mass and function of a variety of organs that result in symptoms and signs such as weakness and anemia, all of which contribute to a reduction in the quality and duration of the patient's life.

Early nutritional intervention can help prevent the development of malnutrition and weight loss. But while conventional nutritional supplements may help to increase overall dietary intake they cannot tackle the underlying metabolic disorders that lead to cachexia and its characteristic loss of muscle mass^[4].

The formulation of Resource® Support™ is based on the latest understanding of these metabolic abnormalities. It is rich in omega-3 polyunsaturated fatty acids, particularly eicosapentaenoic acid (EPA). In addition, it contains a high level of proteins, essential amino acids and vitamin E.

These nutrients have been shown to improve rates of protein synthesis, while the carefully selected nutrient blend is known to limit the magnitude of cachectic metabolic abnormalities and to support immune responses.

Dr Carmen Gomez Candela, Head of Clinical Nutrition and Dietetics Department, la Paz Hospital, Madrid, Spain, said “Early and continued use of specialized nutrition such as Resource® Support™ will allow the oncology team to help patients gain weight, optimize nutritional support and tackle the detrimental effects of malnutrition on patients’ responses to standard therapies and their well being.”

She added that, “specialized nutritional support should be viewed as a cornerstone of weight management for patients with solid tumors who have cachexia or are at risk of developing it.”

Delegates heard from Dr Mike Tisdale, Professor of Pharmacology, Ashton University, Birmingham, UK, how the use of EPA has been shown to modulate the metabolic response to cancer induced weight loss.

Dr Robert Wolfe, Professor of Clinical Research, University of Texas, US. said “Certain amino acids are important in both normal metabolism and cachexia. In particular, essential amino acids such as leucine appear to be critical to stimulating protein synthesis.”

Patients will find that Resource® Support™ is convenient and easy to use, offering a nutritionally complete medical food — prepared as a ready-to-use beverage designed to deliver calories, proteins and other specific nutrients quickly and efficiently.

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Novartis Medical Nutrition offers a complete range of enteral (tube feeding) and oral nutrition products and devices tailored to the varying needs of patients and healthcare professionals. The product range encompasses supplements, which are taken orally, as well as other products administered through tube feeds and specific medical devices.

Novartis AG (NYSE: NVS) is a world leader in pharmaceuticals and consumer health. In 2002, the Group's businesses achieved sales of USD 20.9 billion and a net income of USD 4.7 billion. The Group invested approximately USD 2.8 billion in R&D. Headquartered in Basel, Switzerland, Novartis Group companies employ about 78 200 people and operate in over 140 countries around the world. For further information please consult <http://www.novartis.com>.

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