Influence of different micronutrient combinations on the growth and survival of human liver cancer cells

In these scientific serial tests, the effect of various micronutrient combinations on human liver cancer cells was evaluated in terms of their induction of cell growth and cell survival.

The dosages used corresponded to the recommended daily intakes. The test controls (cancer cells without the addition of tested micronutrients) are shown in the graphs as a dotted red line (zero line).

The results of the effect of these micronutrient combinations are shown as a percentage of the decrease of cancer cells (below the zero line) or increase of cancer cells (above the zero line) in relation to the controls.

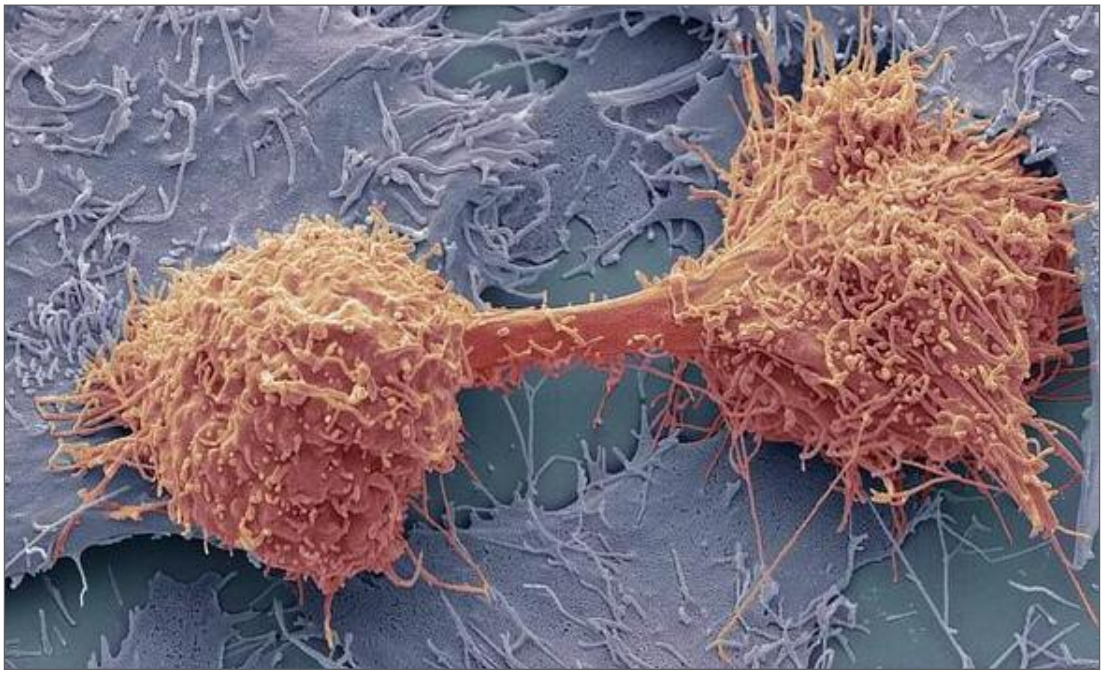
The results illustrate that not all micronutrient combinations are capable of killing cancer cells. On the contrary, the micronutrient combinations designated as "comparison combinations" led to an average increase in the growth of cancer cells by 56% (dark red column on the right).

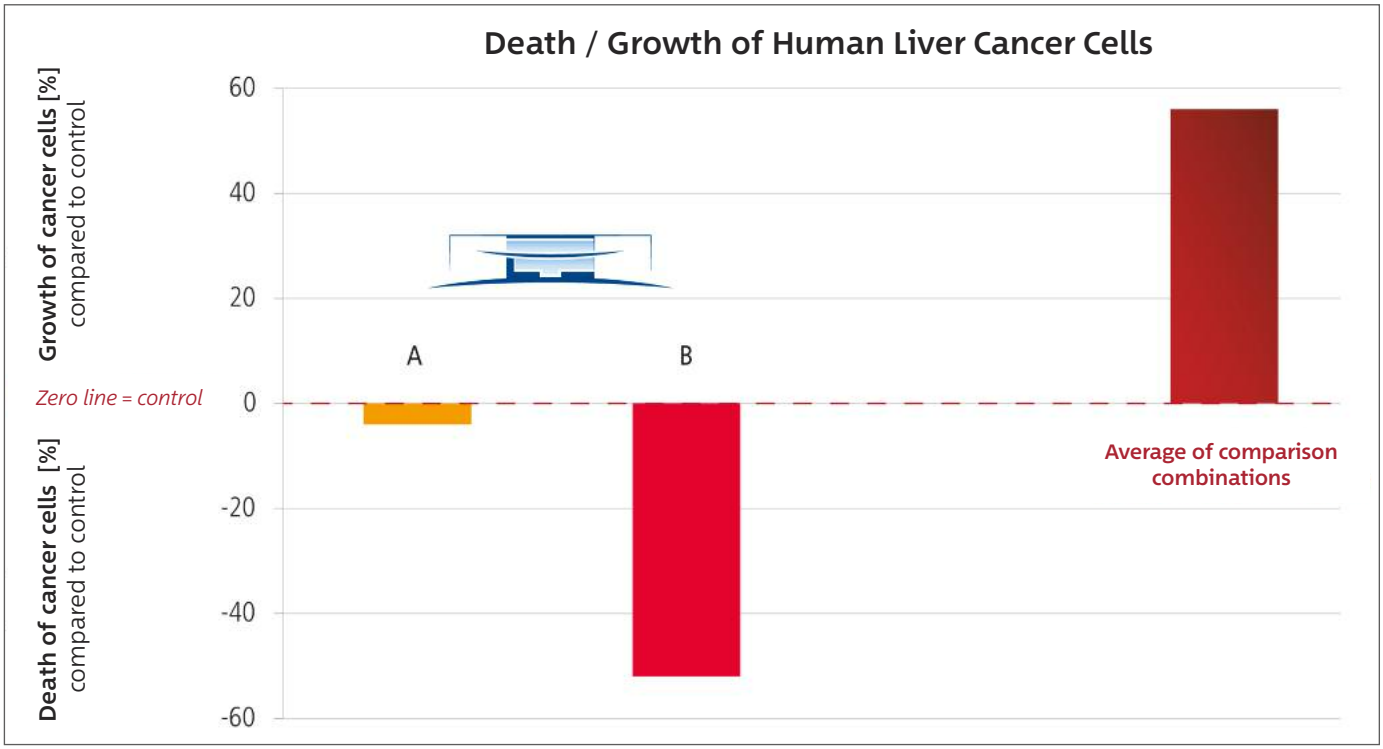
In contrast, the micronutrients developed in collaboration with the Dr. Rath Research Institute and tested in this research project were able to block the multiplication of cancer cells and induce the natural death of cancer cells (apoptosis).

A basic micronutrient combination (column A) led to a halting – and even a slight decrease – of cancer growth. Particularly remarkable was the inhibiting effect shown by a micronutrient combination specifically developed for this purpose (column B). This combination exhibited a significant decrease of cancer cells. With this specific micronutrient combination, more than half (52%) of the liver cancer cells were killed.

One cannot rule out the possibility that the explanation for this alarming result was the

Microscopic image of a dividing liver cancer cell





Tested micronutrient combinations composed of:
A: Different vitamins, minerals, trace elements, amino acids and phytobiologicals
B: Vitamin C, lysine, proline, arginine, green tea extract, quercetin, selenium, copper, manganese

Study: Comparison of the efficacy of several nutritional supplements on cancer and normal cells growth
www.jcmnh.org/go/nutritional-supplements-on-cancer-and-normal-cells-growth

selection of less expensive synthetic materials for use in these micronutrient combinations. Thus, the chemically synthesized micronutrients could have competitively inhibited the access of natural micronutrients to the interior of cells and, thereby blocked their biological effect – in this case, the induction of cancer cell death.

Based on the results of these experiments, the occasional media coverage about the alleged cancer-promoting effects of certain vitamins may at least be partly explainable.

Poorly designed nutritional supplements provide a breeding ground for the general defamation of natural health approaches.