



Purpose of this document

Since the early 2000s, intermittent fasting and similar diets have become **increasingly popular among the general public and patients**. A growing number of books, websites, press articles and television reports have contributed to the increasing popularity of fasting among the general public and have triggered new interest among cancer patients. This is mainly due to the fact that most of these publications and reports highlight research results in laboratory animals or cell cultures that claim to have beneficial effects on cancer, which have yet to be confirmed in humans.

This document is intended for healthcare professionals who play a vital role in informing and supporting their patients.

In partnership with the French National Cancer Institute (INCa), **a working group of experts from the NACRe network reviewed the state of knowledge** on “Fasting, restrictive diets and cancer”.

After a **systematic review and analysis of all the scientific data** obtained from the numerous experimental animal studies and the limited number of epidemiological and clinical studies currently available, the working group drew to the following conclusions.



The NACRe Network

The **French Network for Nutrition And Cancer Research (NACRe)** brings together public research teams and experts in the field of “nutrition and cancer” from all over France.

The Network’s main mission is to contribute to the development of research in the field of nutrition and cancer by promoting scientific exchanges and setting up multidisciplinary projects. Its second mission is to disseminate knowledge to the public (health authorities, the general public, healthcare professionals, etc.).

For further information

Read the NACRe network’s report:

« *Jeûne, régimes restrictifs et cancer : revue systématique des données scientifiques et analyse socio-anthropologique sur la place du jeûne en France* ». Novembre 2017.

Available to read at
www.inrae.fr/nacre

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COLLECTIVE EXPERTISE

The French Network for
Nutrition And Cancer
Research

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FASTING, RESTRICTIVE DIETS AND CANCER



Healthcare
professionals



With support from INCa



Available scientific evidence

The majority of scientific data comes from animal studies. These studies have significant **limitations** and their results cannot be extrapolated to humans. Data on humans is scarce, and most of the available data is of **poor quality**.

Effects on cancer developement – Primary prevention

There is currently not enough data available. To date, there is no evidence to suggest that fasting and restrictive diets have a beneficial effect on the primary prevention of cancer in humans.

Interaction with cancer treatments, effects during cancer

There is currently **not enough data to show that fasting and restrictive diets have a beneficial effect** on the effectiveness of cancer treatments or on the prognosis of cancer.
During cancer treatment, fasting or restrictive diets **increase the risk of malnutrition and sarcopenia**, two known negative prognostic factors.

Fasting, restrictive diets and malnutrition: in France and Europe

In the field of “nutrition in **cancer patients**”, the guidelines of **SFNCM** (The French Society for Clinical Nutrition and Metabolism – Société francophone de nutrition clinique et métabolisme) **and ESPEN** (The European Society for Clinical Nutrition and Metabolism) focus on screening, preventing and treating **malnutrition**.
In 2017, **ESPEN recommended that patients who are malnourished or at risk of malnutrition should not follow a restrictive diet: “we recommend to not use dietary provisions that restrict energy intake in patients with or at risk of malnutrition.”**

Recommendations for the primary prevention of cancer

- ➔ To inform the general public that, according to current scientific knowledge, there is **no evidence that fasting and restrictive diets** are effective in preventing cancer.
- ➔ To make the public aware of dietary recommendations to help **prevent** cancer. These guidelines based on the levels of evidence, are regularly updated and disseminated by the **Word Cancer Research Fund (WCRF), INCa** and the **NACRe network**.

Healthcare professionals should listen to their patients’ needs and encourage dialogue that takes into account current knowledge and potential risks.



Recommendations for cancer care

- ➔ To establish training programmes for **healthcare professionals** on fasting and restrictive diets to help improve dialogue with patients.
- ➔ To implement actions to raise awareness of the risks of fasting and restrictive diets among patients.

For patients who still wish to fast or to follow restrictive diets despite this information:

- ➔ Proposing and conducting a dietary and nutritional assessment prior to any type of carbohydrate or calorie restriction diet.
- ➔ For patients who are malnourished or at high risk of malnutrition, as well as for those with diabetes, carbohydrate and calorie-restricted diets are not recommended.
- ➔ All patients on a carbohydrate-restricted diet should be referred to a dietician or nutritionist.
- ➔ Proposing and implementing regular dietary and nutritional monitoring throughout the duration of the carbohydrate and/or calorie restriction diet.

Methods of support to monitor the nutritional status of the above-mentioned patients:

- ✓ Setting clear goals and limits (maximum limit of weight loss, limit of muscle mass or muscle strength loss);
- ✓ Monitoring their weight (weekly);
- ✓ At each visit (ideally every 2 weeks), assessing their physical capacity (e.g. Hand Grip Test) and ideally determining their body composition (e.g. by impedance measurements);
- ✓ Carrying out a dietary assessment of their diet during and outside periods of restriction;
- ✓ Checking kidney function and any deficiencies by means of monthly biological checks (blood ionogram, urea, creatinine, blood count, platelets, prothrombin rate, activated partial thromboplastin time, and vitamins D, B9 and B1).