



## THE FACTS: IARC'S SURPRISING STANCE ON RED MEAT - MONOGRAPH 114

The International Agency for Research on Cancer (IARC) upset meat lovers everywhere when it ignored the health benefits of consuming nutrient-rich red meat and the weight of scientific evidence, classifying [red meat](#) as a probable carcinogen. This controversial decision, which was rebuffed by the World Health Organization, was based on what IARC itself calls "[limited evidence](#)."

### Background:

- Red meat has been a staple of the human diet for more than two million years.
- Cooked red meat, provides large amounts of iron, creatine, zinc, phosphorus, B-vitamins, and lipoic acid. Consumption of these nutrients has contributed to the course of human evolution and health.
- While overconsumption of processed meats has been an area of concern, [scientific experts agree](#) that measured consumption of red meat does not pose a health risk.
- From April 18-19, 2014, IARC convened an advisory group which recommended that red meat be studied by the Agency's Monograph program, calling the substance a "high priority."
- From October 6-13, 2015, IARC met to discuss the hazards associated with red meat.
- [Monograph 114](#) concluded that red meat consumption is a "probable carcinogen," a Group 2A carcinogen.
- IARC's conclusion was "based on [limited evidence](#) that the consumption of red meat causes cancer in humans."
- Several Working Group members [disagreed with the Group 2A classification](#). After seven days of deliberation, the committee of 22 settled for "majority" agreement on the 2A classification. IARC typically prefers a [consensus agreement](#).
- The World Health Organization immediately [distanced](#) itself from IARC's findings.

GROUP	WHAT DOES IT MEAN?	WHAT DOES IT INCLUDE?
GROUP 1	<b>CARCINOGENIC TO HUMANS</b> Sufficient evidence in humans. Causal relationship established.	 Tobacco, mustard gas, plutonium, processed meats, canned fish, alcohol, sun
GROUP 2A	<b>PROBABLY CARCINOGENIC TO HUMANS</b> Limited evidence in humans. Sufficient evidence in animals.	 Red meat, frying, very hot beverages, exposures from working in hairdressing
GROUP 2B	<b>POSSIBLY CARCINOGENIC TO HUMANS</b> Limited evidence in humans. Insufficient evidence in animals.	 Pickled vegetables, radiofrequency electromagnetic fields, exposures from working in carpentry, gasoline
GROUP 3	<b>CARCINOGENICITY NOT CLASSIFIABLE</b> Inadequate evidence in humans. Inadequate evidence in animals.	 Coffee, tea, caffeine, fluorescent lighting
GROUP 4	<b>PROBABLY NOT CARCINOGENIC</b> Evidence suggests no carcinogenicity in humans/animals.	 ONLY 1 CHEMICAL EVER PLACED IN THIS GROUP OF ALL SUBSTANCES ASSESSED Caprolactam, which is used in the manufacture of synthetic fibres.

Source: [Compound Interest](#)

### What IARC Said

"The Working Group concluded that there is sufficient evidence in human beings for the carcinogenicity of the consumption of processed meat. Chance, bias, and confounding could not be ruled out... for the data on red meat consumption, since no clear association was seen in several of the high quality studies and residual confounding from other diet and lifestyle risk is difficult to exclude. The Working Group concluded that there is limited evidence in human beings for the carcinogenicity of the consumption of red meat. There is inadequate evidence in experimental animals for the carcinogenicity of consumption of red meat and of processed meat. – *IARC Monograph 114 summary in Lancet Oncology (Oct. 26, 2015)*

"For an individual, the risk of developing colorectal cancer because of their consumption of processed meat remains small, but this risk increases with the amount of meat consumed." – *Kurt Straif, Ph.D., Head of the IARC Monographs Programme (Oct. 26, 2015)*

## What the Experts Said

“The bottom line is the epidemiologic science on red meat consumption and cancer is best described as weak associations and an evidence base that has weakened over time. And most importantly, because red meat is consumed in the context of hundreds of other foods and is correlated with other behavioral factors, it is not valid to conclude red meat is an independent cause of cancer.” – *Dominik Alexander, Ph.D., MSPH, Principal Epidemiologist at EpidStat Institute* ([Oct. 28, 2015](#))

“In my experience as an observer to an IARC working group, the process typically involves scientists who have previously published research on the substance being reviewed and may have a vested interest in defending their own research. In the case of red and processed meat, the overall scientific evidence simply does not support their conclusion.” – *James Coughlin, Ph.D., CFS, Nutritional Toxicologist* ([Oct. 28, 2015](#))

“There is little or no evidence that vegetarians in the UK have lower risk of bowel cancer than meat-eaters.” – *Ian Johnson, Ph.D., Research Leader at the Institute of Food Research* ([Nov. 4, 2015](#))

“Overstating scientific confidence in a causal connection between red meat and cancer has done the public a disservice. Recent decades are littered with policies based on weak relative risks which, when tested in clinical trials, had to be reversed. Weak associations are untrustworthy because they could well be due to bias associated with any number of factors in diet or lifestyle.” – *Gordon Guyatt, M.D., M.Sc., Physician and Distinguished University Professor in the Departments of Clinical Epidemiology & Biostatistics and Medicine at McMaster University* ([Nov. 24, 2015](#))

## Additional Links & Resources