ARC MONOGRAPHS

RED MEAT AND PROCESSED MEAT VOLUME 114

This publication represents the views and expert opinions of an IARC Working Group on the Evaluation of Carcinogenic Risks to Humans, which met in Lyon, 6–13 October 2015

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IARC MONOGRAPHS ON THE EVALUATION OF CARCINOGENIC RISKS TO HUMANS

International Agency for Research on Cancer



6. EVALUATION

6.1 Cancer in humans

There is *limited evidence* in humans for the carcinogenicity of consumption of red meat. Positive associations have been observed between consumption of red meat and cancers of the colorectum, pancreas, and prostate.

There is *sufficient evidence* in humans for the carcinogenicity of consumption of processed meat. Consumption of processed meat causes cancer of the colorectum. Positive associations have been observed between consumption of processed meat and cancer of the stomach.

6.2 Cancer in experimental animals

There is *inadequate evidence* in experimental animals for the carcinogenicity of consumption of red meat.

There is *inadequate evidence* in experimental animals for the carcinogenicity of consumption of processed meat.

There is *inadequate evidence* in experimental animals for the carcinogenicity of haem iron.

6.3 Overall evaluation

Consumption of red meat is *probably carcinogenic to humans (Group 2A).*

Consumption of processed meat is *carcinogenic to humans (Group 1)*.

6.4 Rationale

In making the overall evaluation, the Working Group took into consideration all the relevant data, including the substantial epidemiological data showing a positive association between consumption of red meat and cancer of the colorectum, and the strong mechanistic evidence. Taken as a whole, this evidence led the Working Group to classify red meat as *probably carcinogenic to humans (Group 2A).*