## Letters

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Letters to the Editor:

Comments on Swiss Plan to Fight
Against Breast Cancer,

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I KNOW my colleagues Rajower, Sasco and Kleihues are fully aware of a major risk factor, diet, for postmenopausal breast cancer, a major neoplasm in the Western world. Yet, in the brief commentary dealing with Switzerland, this area was not mentioned [1]. If we are to develop a strategy likely to be successful in "the fight against breast cancer", we need to take into account the important knowledge on nutritional elements associated with breast cancer. The same considerations apply to colon cancer. We were charged with developing a technical report on colon cancer under the auspices of UICC in 1975 [2]. We were struck by the fact that people in Switzerland, and in particular in Geneva, displayed a high mortality from colon cancer.

It seems clear now that the carcinogens associated with colon and breast cancer are the heterocyclic amines formed during broiling or frying of meats, a finding originally made by Sugimura and colleagues in 1977 [3, 4]. During ordinary eating, the amount of these chemicals is quite small. However, the traditional intake of mixed dietary fats amounting to approximately 40% of calories exerts a powerful promoting effect for breast and colon cancer [5–7]. These aetiological factors need consideration in order to achieve an effective control of these common tumours in the Western world.

Procedures have been developed to lower the formation of heterocyclic amines during cooking and these can be readily applied in the home kitchen or in restaurants [4].

In addition, there have been careful dose response studies on dietary fat levels that would minimise the promoting effects, and these are close to 20% of calories [6, 7]. With the availability of low-fat foods, this goal of lowered fat intake is readily achievable.

Not all fats have equal promoting potential. In particular, monounsaturated oils such as olive oil have little promoting potential [5–8]. The incidence of breast cancer in Southern Italy and in Greece is less than half that in Switzerland or the Western world generally. More extensive intake of protective vegetables and fruits may play a role in this desirable lower rate in the Mediterranean region [8–10].

Thus, the fight against breast cancer should certainly involve a change in nutritional traditions, with less total fat, more bran cereal fibre and more fruits and vegetables.

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