



## **Acrylamide in Foodstuffs – bio-familia Statement dated 5 June 2002**

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### **The Background**

The Swedish National Food Administration (NFA) drew attention to a hitherto unknown health risk. Acrylamide has only recently been detected in foodstuffs although we have probably been exposed to it for generations, most likely since we have been heating food. It is an accepted fact that harmful substances can be formed when foodstuffs are cooked, irrespective of whether they are oven-baked, fried, deep-fried, roasted or grilled, and this includes staple foods, such as bread, hash browns, roast potatoes and coffee. Acrylamide is predominantly produced by the cooking of carbohydrate-rich foods and affects both industrial cooking processes and the preparation of food in the home. There is no evidence to suggest that the risk has increased over recent years and it should therefore be viewed as a risk that has recently come to our attention rather than as a new risk (Source: Swiss Federal Office of Public Health).

On the basis of knowledge obtained from experiments on animals, acrylamide has been identified as a potential carcinogen in humans. In experiments carried out on animals, tumours only developed above 2mg/kg body mass. It is factually misleading to extrapolate this data to predict the theoretical incidence of cancer among humans, and this prediction is also inadequately supported by data from the findings of the animal experiments. It is not yet possible to approximate with sufficient accuracy the average daily intake of humans, although extrapolating the current data would imply a daily intake of approximately 0.1 mg per person per day (all sources).

At present it is not possible to list the most significant products in terms of acrylamide, as they are most certainly not yet all known. In Sweden, acrylamide was found in potato crisps (1.2 mg/kg), French fries (0.45 mg/kg), biscuits (0.41 mg/kg) and crisp breads/breakfast cereals (0.16 mg/kg), as well as white bread and other bakery products (0.05 mg/kg). Our current knowledge of this problem is still incomplete and, although we have the results of studies, which have contributed to the present uncertainty, there is still no validated (= tested) method of analysis. Inter-laboratory tests are currently taking place in Switzerland to improve the validity and quality of the results and the Swiss Federal Office of Public Health is co-ordinating a working group to eliminate the present gaps in our knowledge of the subject.

### **Measures taken by bio-familia AG**

**In the knowledge that research into this subject is still ongoing, at bio-familia we nevertheless took the decision to send all of our product groups to the laboratory to determine whether they contain acrylamide. Working closely with public authorities and scientific bodies, bio-familia is working to uphold food safety among consumers and maintain confidence in our products.**

### **Our Recommendation**

**It is worth observing that this problem should not be taken out of context. Rash, ill-thought-out changes in eating patterns to avoid acrylamide could cause even greater risks to a person's health. Our recommendation at present is simply to maintain a varied, balanced diet.**

### **bio-familia AG**

Dr. H.P. Binz  
Managing Director

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Head of Quality Management



## Acrylamide in Foodstuffs – bio-familia analysis

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In the knowledge that research into this subject is still ongoing, at bio-familia we nevertheless took the decision to send all of our product groups to the laboratory to determine whether they contain acrylamide (please refer to the bio-familia statement dated 5 June 2002 page 2). Although there is not yet an internationally recognised method for determining the presence of acrylamide in foodstuffs, a renowned Swiss laboratory has developed a process, which is reliable based on our knowledge to date.

The results of the analysis of our products are very pleasing. As you can see in the table below, acrylamide could not be detected in any of the products analysed.

**The results of the analysis are shown in the table below.**

Product group/Product	Result	Method
<b>Flake müsli</b>		
article 15121, 3 June 2002	< 0.05 mg/kg**	SAV M 356
article 15325, 17 May 2002	< 0.05 mg/kg**	SAV M 356
<b>Crunchy müsli</b>		
article 15094, 4 June 2002	< 0.05 mg/kg**	SAV M 356
article 15298, 23 May 2002	<0.05 mg/kg**	SAV M 356
<b>Crunchy müsli with fruit</b>		
article 15105, 23 May 2002	< 0.05 mg/g**	SAV M 356

\*\* : < 0.05 mg/kg denotes that no acrylamide was found, in other words, the quantities lie below the limit of detection.