

How GHI may be successful in improving food security and safety

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Global Harmonization Initiative (GHI)



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Principles

Goal

Achieving consensus on the science of food regulations and legislations to ensure the global availability of safe and wholesome food products for all consumers

Impartiality

- No strings with governments or industries
- Members represent themselves – not their employer
- No financial membership hurdles: scientists qualify – no membership fee

To reach the goal

Therefore GHI needs to show that

- changes in food safety regulations are needed
- required changes are possible
- changes will be beneficial

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This we do with our increasing membership:

Statistics to date

	Year	Numbers
Members	2012	192
	2017	447
	2021	1103
	2023	1462
Countries	113	
Ambassadors	103	
Working groups	20	

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EXAMPLES

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Certified Food Safety Professional

Working Group Ethics in Food Safety Practices

Background

Worldwide each year unsafe food causes 600 million cases of foodborne diseases and 420 000 deaths of which 30% are children under 5 years of age (WHO)

This happens despite the many efforts by food safety professionals in the industry and by food safety authorities.

To achieve higher standards in food safety practices, the Global Harmonization Initiative (GHI) proposes that countries make “Food Safety Professional” a regulated profession, similar to medical or legal professions, setting formal requirements for education, registration and the establishment of professional bodies.

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Certified Food Safety Professional

Working Group Ethics in Food Safety Practices

Recommendation to governments worldwide

To recognize Food Safety Professional (FSPro) as a regulated profession in production, retail, logistics or as consultant or auditor.

Purpose

To establish educational and professional requirements and responsibilities for those in positions of responsibility in the food industry, and to support ethical behaviour in food safety practices.

Responsibility for producers

Food producers **to be legally required** to have a FSPro in charge of the design and operation of their Food Safety system.

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Responsibility FSPro

A formal obligation for a FSPro is to always act professionally, i.e., in accordance with the best available scientific standards of food safety. This may take various shapes:

- it could be similar to the medical oath
- it may be linked to a license to practice
- it may be a requirement for membership in a professional body

One way or another it must have a legal basisEducation

The only people who can act ethically in food safety matters are those who have a sufficiently scientifically informed awareness of what food safety is, which then requires a formal education.

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Chemical Food Safety

Ingredients may contain natural potentially toxic components, examples are:

- Phycotoxins (marine biotoxins)
 - Shellfish poison in mussels, scallops, oysters, clams
 - Finfish ciguatoxins in king mackerel, barracuda, and black grouper
- Mycotoxins
 - Aflatoxins in tree nuts, crops, oil seeds, spices
 - Ochratoxins in all major cereal grains
 - Fumonisin in cereals (maize)
- Inherent plant toxins (phytotoxins)
 - Cyanogenic glycosides
 - **Linamarin in cassava**
 - Cyanide and nitrate in sorghum
 - Cyanide in bamboo shoots
 - Cyanide in bitter almonds and apricot kernels
 - Solanines in potatoes
 - Furocoumarins in parsley, grapefruits, limes
 - Lectins in red kidney beans
 - Taxiphyllin in bamboo
- Allergens
 - Proteins in:
 - Peanuts
 - Treenuts
 - Eggs
 - Milk
 - Soy

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Linamarin in cassava

Cassava is one of the most drought-tolerant crops, capable of growing on marginal soils and feeding about a billion people, mostly in Africa and Asia. It is the staple food of about a billion people

Linamarin is a cyanogenic glucoside in cassava that when ingested releases HCN that is very toxic and may cause severe disease and even death. Therefore, before consumption, cassava must be processed to break down the linamarin and remove the cyanide.

Linamarin can be removed by the enzymatic activity of linamarinase, present in the leaves of the cassava plant.



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Linamarin in cassava

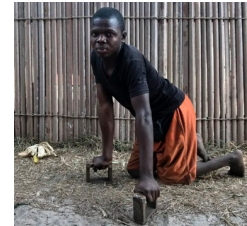
KONZO in Children

an upper motor neurone disease of abrupt onset

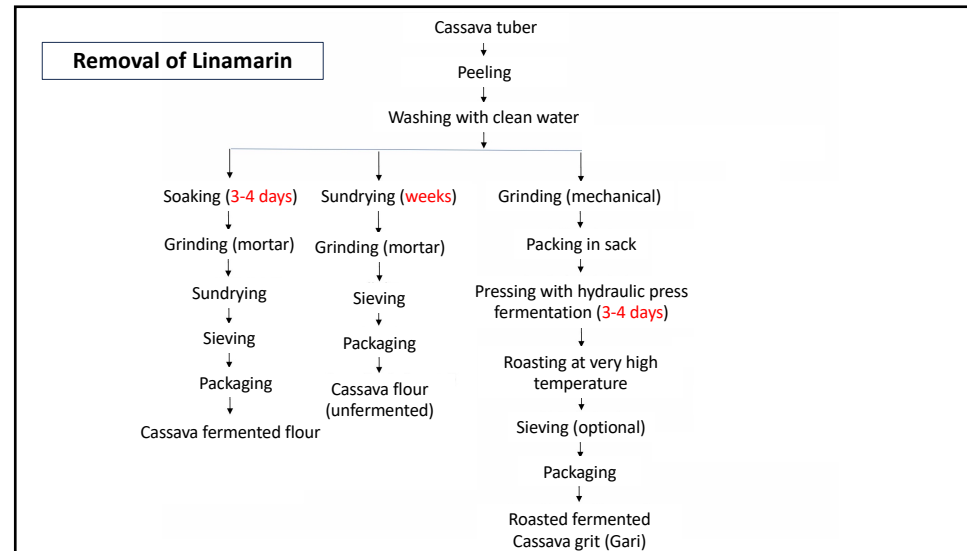
If not sufficiently processed, linamarin will remain in cassava and release cyanide in the body. It may kill people, in particular children and if ingested in small amounts for a long time, it causes the illness konzo:

The child will wake up one morning, limping or only able to crawl.

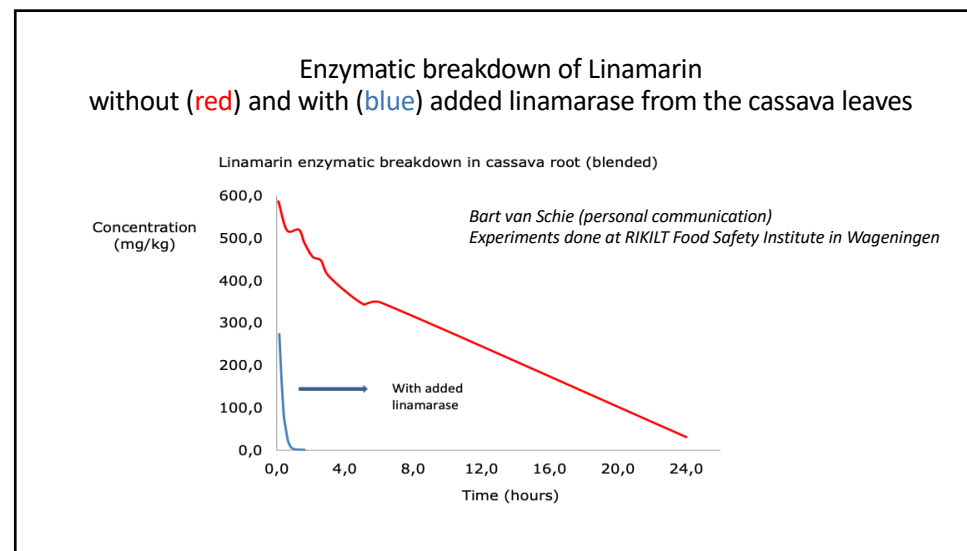
This condition will remain unchanged throughout the child's life.



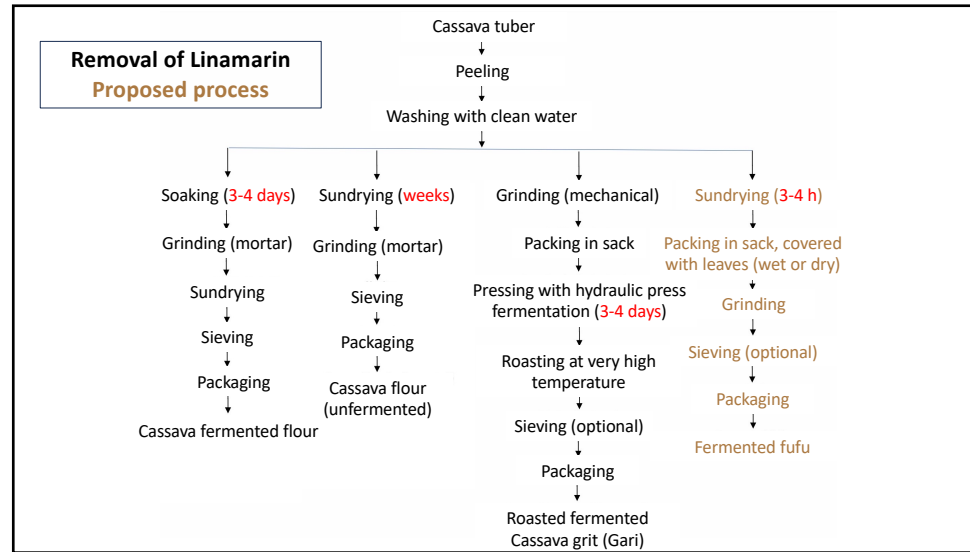
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After confirmation by in situ application of the proposed process at various locations, the WG Education and Training of Food Handlers will produce **pictorial and verbal** training material to train trainers, who will train trainers, who will train trainers, etc., all the way to the food handlers at home.

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Anonymous Whistleblowing Reporting

WG Global Incident Alert Network

Background

companies that disregard food safety have done enormous harm to people, just to refresh your mind, here is a selection of serious cases:

Melamine in milk and protein concentrates
Lead oxide in paprika
Lead chromate in turmeric
Salmonella in peanut butter
Diethylene glycol in wines
Sunflower oil mixed with mineral oil
Transformer oil used for French fries
Honey contaminated with chloramphenicol
Biscuits causing babies to choke

AT LEAST IN THE ABOVE AND MANY OTHER CASES THE CULPRIT HAS BEEN PUNISHED

THAT, HOWEVER, DOES NOT HELP THE VICTIMS

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In such cases there have been persons who knew what was happening. When ignored, these people did not dare to inform authorities, because of fear of retaliation or dismissal, while after all, they had a family to feed.

ANONYMOUS WHISTLEBLOWING

In known cases of anonymous whistleblowing, the anonymity appeared to be just pretence, because eventually the employer found out from the authority that warned them. Until recently, in most countries the government protected the companies and not the employees. In the EU and North America this is gradually changing and hopefully it will be common sense in the future to protect the whistleblower and hence the consumer instead of a dishonest company management.

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ANONYMOUS WHISTLEBLOWING

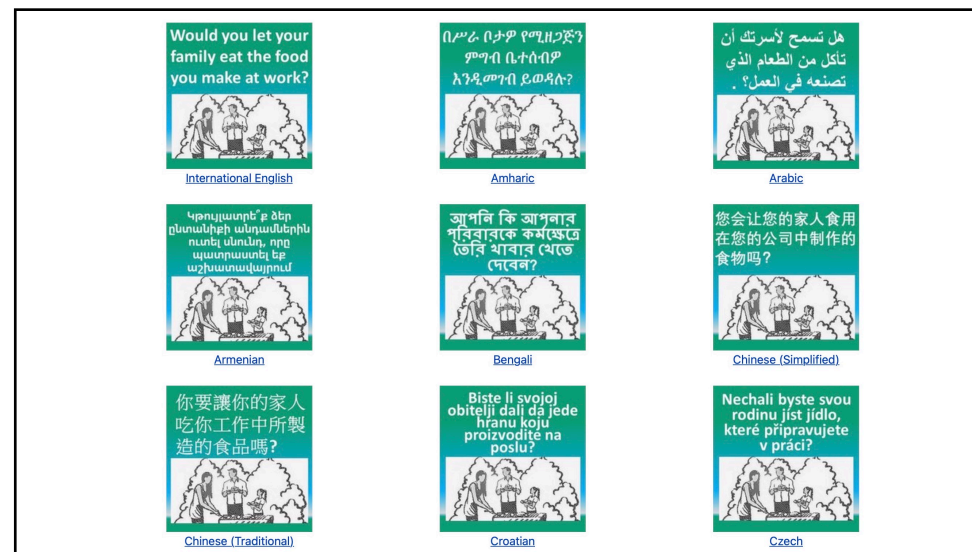
Based on information collected by GHI, a really anonymous whistleblowing possibility has been developed. It is now possible to use a website in such a way that GHI is alarmed but GHI cannot know who the whistleblower is.

Nevertheless, by using the site, GHI can assess the information provided and if found to be serious and potentially very harmful, GHI alerts the local food safety authorities, asking to investigate the case.

Thanks to GHI's ambassadors, the webpage is available in about 40 languages. In all languages the first question is:

"Would you let your family eat the food that you make at work?"

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<p>Zou jij jouw gezin het voedsel laten eten dat wordt gemaakt waar jij werkt?</p>  <p>Dutch</p>	<p>Laisseriez-vous votre famille manger la nourriture que vous préparez au travail?</p>  <p>French</p>	<p>Würden sie ihre Familie die Lebensmittel essen lassen, die sie bei ihrer Arbeit herstellen?</p>  <p>German</p>
<p>Engedné, hogy a családja megegye a munkahelyén készített ételeket?</p>  <p>Hungarian</p>	<p>Apakah anda akan membiarkan keluargamu untuk memakan makanan yang dibuat di tempat kerjamu?</p>  <p>Indonesian</p>	<p>Lasceresti consumare ai tuoi familiari gli alimenti che produci nell'azienda dove lavori?</p>  <p>Italian</p>
<p>あなたの家族にあなたが職場（食品工場）で作った食品を食べさせますか？</p>  <p>Japanese</p>	<p>Сіз жұмыс кезінде дайындаған тамағыңызды отбасыңызға жеуге рұқсат етесіз бе?</p>  <p>Kazakh</p>	<p>Ar jūs leistumėte savo šeimai valgyti jūsų įmonėje pagamintą maistą?</p>  <p>Lithuanian</p>


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<p>Дали би му дозволил на своето семејство да ја јаде храната што се произведува во твојата фабрика?</p>  <p>Macedonian</p>	<p>Adakah anda akan membenarkan keluarga anda memakan makanan yang anda sediakan di tempat kerja?</p>  <p>Malay</p>	<p>Da li biste dozvolili Vašoj porodici da konzumira hranu koju vi proizvodite na poslu?</p>  <p>Montenegrin</p>
<p>Ville du la familien din spise den maten du lager på jobben?</p>  <p>Norwegian</p>	<p>Nyaata bakka hojii keessaniitti omishamu maatiwwan keessan akka nyaatan ni eeyyemtuu?</p>  <p>Oromo</p>	<p>Você deixaria sua família comer a comida que você prepara no trabalho?</p>  <p>Portuguese</p>
<p>Позволите ли вы своей семье потреблять продукцию, которую производит Ваше предприятие?</p>  <p>Russian</p>	<p>Да ли бисте дозволили својој породици да јаде храну коју правите на послу?</p>  <p>Serbian</p>	<p>මමටදීත් ඒකීය සේවකයන්දී ඊළඟට කාන කුණක් මම මිදුලේ කාමයනිමයනි මංගෙව්නමය කිවිමට මම කැමති වෙමි මුණිම කිවිමට මගිටිමයනමය?</p>  <p>Sinhala</p>

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Global Harmonization Initiative
Advancing science-based food safety standards

GHI Whistleblower Food Safety Incident Report Site

[Home](#)
[Press releases](#)
[Frequently Asked Questions](#)

REPORTING FOOD SAFETY INCIDENTS THAT MAY LEAD TO SERIOUS HARM

If you are aware of anything that is wrong with food to the extent that consumption may cause serious harm and you see no other way to prevent such harm, you are invited to fill in the form below. The Global Harmonization Initiative (GHI) will then evaluate the incident and act upon it in the most appropriate way. By submitting this anonymous form, you will not be personally identified.

Please Note: To protect your identity ensure that the information you provide is completely anonymous:

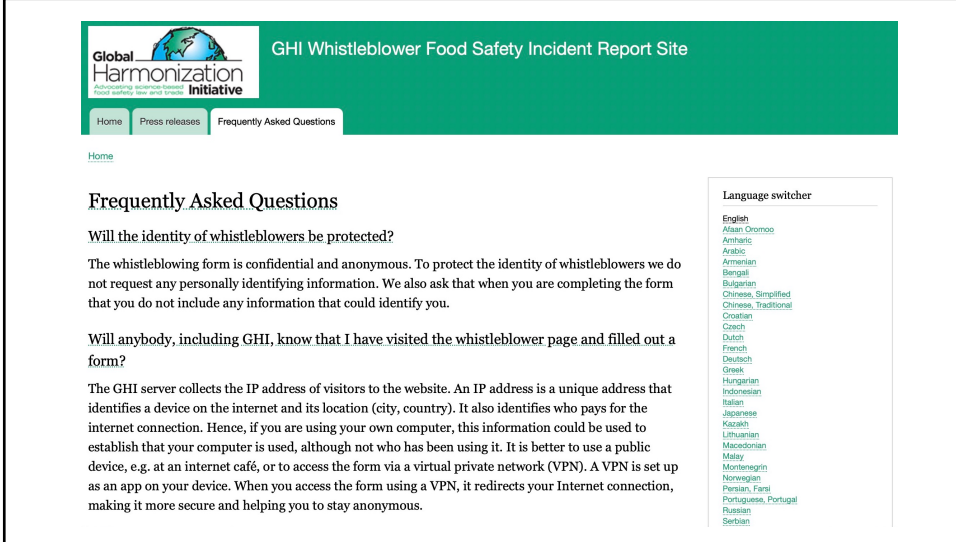
1. do not include any details that could be used to identify you
2. avoid using any company owned networks, smartphones or computers

Read the [frequently asked questions](#) for whistleblowers to find out how we safeguard your privacy.

By filling in this form, it is assumed that you

1. have reasons not to report the food safety incident internally
2. or did report the food safety incident internally but to no avail

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Global Harmonization Initiative
 Better quality. Safer food. Smoother trade. More people. One world. One food.

GHI Whistleblower Food Safety Incident Report Site

Home Press releases Frequently Asked Questions

Home

Frequently Asked Questions

Will the identity of whistleblowers be protected?

The whistleblowing form is confidential and anonymous. To protect the identity of whistleblowers we do not request any personally identifying information. We also ask that when you are completing the form that you do not include any information that could identify you.

Will anybody, including GHI, know that I have visited the whistleblower page and filled out a form?

The GHI server collects the IP address of visitors to the website. An IP address is a unique address that identifies a device on the internet and its location (city, country). It also identifies who pays for the internet connection. Hence, if you are using your own computer, this information could be used to establish that your computer is used, although not who has been using it. It is better to use a public device, e.g. at an internet café, or to access the form via a virtual private network (VPN). A VPN is set up as an app on your device. When you access the form using a VPN, it redirects your Internet connection, making it more secure and helping you to stay anonymous.

Language switcher

- English
- Akan, Oromoo
- Amharic
- Arabic
- Armenian
- Bengali
- Bulgarian
- Chinese, Simplified
- Chinese, Traditional
- Croatian
- Czech
- Dutch
- French
- Deutsch
- Greek
- Hungarian
- Indonesian
- Italian
- Japanese
- Kazakh
- Lithuanian
- Macedonian
- Malay
- Montenegrin
- Norwegian
- Persian, Farsi
- Portuguese, Portugal
- Russian
- Serbian

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The core message is that the system is really anonymous

Even GHI cannot find out who reported a food safety incident that will be reported by GHI to local food safety authorities - if found by a global team of experts to be real and serious.

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Other topics include

- the use of bacteriophages to replace chemical preservatives; the safety of food irradiation
- halal food
- global food safety regulations

More can be found on the GHI website and by participating in GHI webinars that are free of charge and are not restricted to members of GHI.

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Food Safety Management
A Practical Guide for the Food Industry

ENSURING GLOBAL FOOD SAFETY
Empowering Global Harmonization

NUTRITIONAL AND HEALTH ASPECTS OF FOOD IN NORDIC COUNTRIES

NUTRITIONAL AND HEALTH ASPECTS OF FOOD IN WESTERN EUROPE

NUTRITIONAL AND HEALTH ASPECTS OF FOOD IN THE BALKANS

NUTRITIONAL AND HEALTH ASPECTS OF FOOD IN EASTERN EUROPE

REGULATING SAFETY OF TRADITIONAL AND ETHNIC FOODS

NUTRITIONAL AND HEALTH ASPECTS OF FOOD IN SOUTH ASIAN COUNTRIES

FOOD SAFETY SHORT STORIES
87 Real-Life Cases
Peter Oudshoorn, Youssef Mouton and Thibault Lefebvre

GHI is looking for editors for the Traditional and Ethnic Food Series volumes to come

Elsevier offers a special rate to our members. When ordering, use the code **GHI30** to obtain a 30% discount on the books.

(Ethics International Press)

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Membership of GHI

If you agree with the values of GHI and its impartiality you are invited to apply for free membership of our global community of scientists. GHI membership provides you with the resources and opportunities to connect and collaborate with your scientific colleagues around the world.

<https://www.globalharmonization.net/become-a-member>

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Thank you for your attention!



<https://www.globalharmonization.net>