

## Introduction

Welcome to the Food Safety Plan and Sanitation Plan training hosted by the Ministry of Health. My name is Nancy Ross. I'm a food scientist, and I work in the food industry in British Columbia for many years now. I always like to start my trainings of HACCP with few questions about the history of HACCP. As most of you know HACCP started by NASA for food prepared for the trip to the moon. And I was just wondering if, most of you may have seen this product, Tang, which was the drink that was considered a great development for their menu. And I was just wondering if anybody could tell me the day that man landed on the moon. It's many years ago now.

At that time, Pillsbury was the group developing the food and it was, HACCP really started in the late fifties, but the man landed on the moon on July 20th, 1969. And HACCP was the food safety system that was used to ensure that safe food was available to the astronauts. Not much really happened with HACCP implementation at that time. But in 1973, there was a major food poisoning outbreak in the United States due to under-processing of canned mushrooms. Could anybody tell me what microorganism would have been the problem in this product?

It was a botulism. And so at that time, the U.S. government said, "Let's take a look at these HACCP principles that have been developed" and they implemented sort of the first HACCP-based food safety system, and it was the low-acid canned food regulations that were used in the United States. Since then HACCP has become the way of doing food safety.

I always like to tell you a little bit about my life in the food industry. My first job was in a dairy plant in Vancouver, Silverwood Dairies, which is long gone now. You can how the street has changed. It's actually a condominium now, and it was my first introduction to working in a food plant. It was a federally registered dairy plant. And you can see some of the things that were typical back then, we had no hand wash stations in the facility. I don't remember it being emphasized to wash our hands. We did not wear hair nets at that time, but by 1981 we were wearing hairnets, and you can see my first job every morning was to scoop cockroaches off the top of the cheddar—off the cottage cheese vat. And I did the number one no-no in a food plant, I used a piece of packaging, a yogurt cup to do that task.

I don't want to give you the impression that it was *all* bad there, the dairy workers did use an iodine hand dip before handling equipment and food products.

I continued to work in the dairy industry and ended up in Ottawa, working for Agriculture Canada, and was part of the implementation of the first HACCP-based inspection program was for federally registered dairies. And then continued—I came back to British Columbia and have worked extensively in the dairy industry and other industries implementing HACCP plans for food companies. I also teach HACCP at UBC. I tell my students that when I was a student, I only heard about HACCP *once* in a food plant sanitation course, and my exam question was "What does the acronym stand for?"

The other thing I remember that it was developed by NASA. And now I teach an undergraduate course, which is one-third HACCP and a graduate course: it is an entire semester on HACCP. So you can really see that HACCP is the way that we do food safety today. In 1993, Codex published their document guidelines for food safety and HACCP, and it really still is the document that we base our HACCP programs on today. The program that we are going to be talking about is based on those Codex HACCP principles.