

Thank you for choosing to participate in the  
**TAP Series Food Safety Manager Certification Training.**

This enhanced e-learning program will allow you to learn the necessary skills to complete and pass an approved Food Safety Manager Certification exam. You will have 60 days to complete your training.

A certified Food Safety educator will track your progress and provide feed back to you as you complete the lessons in the program. Please review the pages attached as these temperatures listed here are important to remember. Once you have completed all lessons and the practice exam on the CD we will arrange for you to complete an approved certification exam.

Participants, who successfully pass the certification exam with 75% or higher, will receive a certificate of recognition from Canadian Food Safety Group.

In conjunction with TAP, Canadian Food Safety Group is pleased to offer Canada's only **Pass Assurance Standard**. *If a student completes the 4 requirements and does not pass one of the nationally recognized food safety certification exams, TAP Series will allow the student to re-take the training for free. Students are required to fax TAP a copy of their examination failure notice demonstrating the date the examination was taken. Upon verification that the PAS standards were followed the student will be reset in the TAP system. Student will then have 30 days to restudy and retake the certification examination.*

*Details on the Pass Assurance Standard are on page 8.*

The minimum computer requirements are listed below:

For Windows 95, 98, ME	For Windows NT Workstation 4.0	For Windows 2000, XP
<ul style="list-style-type: none"> <li>• Pentium 133 MHz processor</li> <li>• 32 MB RAM</li> <li>• 4X CD ROM</li> </ul> An internet connection of 28.8 kbps	<ul style="list-style-type: none"> <li>• Pentium 133 MHz processor</li> <li>• 32 MB RAM</li> <li>• 4X CD ROM</li> </ul> An internet connection of 28.8 kbps	<ul style="list-style-type: none"> <li>• Pentium 133 MHz processor</li> <li>• 32 MB RAM</li> <li>• 4X CD ROM</li> </ul> An internet connection of 28.8 kbps

Should you have any questions, comments or concerns please contact me so I may assist you.

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 Canadian Food Safety Group



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Please review these pages before completing your exam.

Please substitute the times and temperatures taught in the TAP program with the times and temperatures listed here.

These times and temperatures are taken directly from the Canadian Food Retail and Foodservices Code. Temperatures in your jurisdiction may be different, please consult with your local public health inspector.

ITEM	Temperature Requirement
Food mixtures containing Poultry, Eggs, Meat, Fish or other potentially hazardous foods	Internal temperature of 74°C (165°F) for at least 15 seconds
Pork, Lamb, Veal, Beef (whole cuts)	Internal temperature of 70°C (158°F)
Rare Roast Beef	Internal temperature of 63°C (145°F) for at least 15 seconds
Poultry	Internal temperature of 74°C (165°F) for at least 15 seconds
Stuffing in Poultry	74°C (165°F)
Ground Meat (chopped, ground, flaked or minced beef, pork, or fish)	70°C (158°F)
Eggs	63°C (145°F) for 15 seconds
Fish	74°C (165°F)
Reheating	74°C (165°F)
Cold Holding Temperature, Refrigeration	4C (40°F) or less
Frozen Foods	-18°C (0°F)

Listed below is section 3.3 Temperature Control, from the Canadian Food Retail and Foodservices Code, please review these pages before completing your exam.



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## Temperature Control (from section 3.3 Food Retail and Food Services Code amended: February 2001) .

All temperatures quoted are internal product temperatures.

### 3.3.1 Frozen Foods

Frozen foods must be maintained at a temperature of 0C (32 °F) or less. To maintain their quality, a temperature of -18°C (0°F) or less is required.

### 3.3.2 Thawing

- a. Potentially hazardous foods **should** be thawed quickly or in a manner that will prevent the rapid growth of pathogenic bacteria.
- b. Food may be thawed:
  - i. under refrigeration at 4C (40°F) or less;
  - ii. completely submerged in cold running water;
  - iii. as part of the cooking process (but only when thawing is taken into consideration in determining cooking time); and
  - iv. by microwaving.
- c. When thawing foods using methods where the thawed portions of the potentially hazardous foods are above 4°C (40°F), the time period above 4°C (40°F), including the time for cooking preparation or the time required to cool the potentially hazardous foods to below 4°C (40°F), **should** not exceed 4 hours.
- d. The only exception to the above procedures and temperature requirement is the thawing of frozen ready-to-eat seafood, which **should** be maintained at 3.3°C. (38°F) or less during thawing.



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## Rationale

Freezing prevents microbial growth in foods, but will not destroy all microorganisms. Improper thawing provides an opportunity for surviving bacteria to grow to harmful numbers and/or produce toxins. In seafood, the lower maintenance temperature of 3.3°C. (38°F) prevents the growth and toxin production of *C. botulinum*.

### 3.3.3 Refrigerated Storage

All potentially hazardous food shall be stored at a temperature of 4°C (40°F) or less. This includes foods that have been prepared and cooled to be served cold.

### 3.3.4 Cooking Raw Foods of Animal Origin

- a. Raw foods of animal origin and food mixtures containing raw foods of animal origin **should** be cooked to heat all parts of the food to the minimum temperatures and for the minimum times outlined for different foods in Appendix B. Other times and temperatures may be acceptable, if they are considered to be equivalent by the regulatory authority having jurisdiction.
- b. Raw foods of animal origin and food mixtures containing raw foods of animal origin **should** be stirred, to ensure that all parts of the food are heated to the minimum temperatures and for the minimum times outlined above.
- c. Where foods are allowed to be served raw or lightly cooked (such as raw oysters, steak tartar, carpaccio, shakes made from raw eggs and so on), the public should be notified of the increased health risk.

## Rationale

To kill microorganisms, food **should** be held at a required temperatures for specified times as outlined in Appendix B. Different species of microorganisms have varying susceptibilities to heat. As well, food characteristics affect the lethality of cooking temperatures. Heat penetrates into different foods at different rates. High fat content in food reduces the effective lethality of heat. High humidity within the cooking vessel and the moisture content of food aid thermal destruction. Heating a large roast too quickly with a high oven temperature may char or dry the outside, creating a layer of insulation that shields the inside from efficient heat penetration. To kill all pathogens in food, cooking **should** bring all parts of the food up to the required temperatures for the correct length of time.



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### 3.3.5 Hot Holding

Potentially hazardous foods that have been prepared, cooked, and are to be served hot, shall be held at a temperature of at least 60°C (140°F).

### 3.3.6 Cooling after Cooking

Potentially hazardous foods that have been cooked and are intended to be kept under refrigerated storage prior to serving, are to be cooled from 60 °C (140°F) to 20 °C (68°F) or less within two hours and then from 20 °C (68°F) to 4 °C (40°F) or less within 4 hours as outlined in the parameters of Appendix B.

#### **Rationale**

*Proper cooling requires removing heat from food quickly enough to prevent microbial growth. Excessive time for cooling of potentially hazardous foods has been consistently identified as one of the leading contributing factors to foodborne illness. During extended cooling, potentially hazardous foods are subject to the growth of a variety of pathogenic microorganisms, which may grow to a sufficient number to cause illness.*

*If the cooking step prior to cooling is adequate and no recontamination occurs, all but the spore-forming organisms such as Clostridium perfringens should be killed or inactivated. However, under poorly monitored conditions, other pathogens such as Salmonella may be reintroduced. Thus, cooling requirements have been based on growth characteristics of organisms that grow rapidly under temperature abuse conditions.*

*Large food items such as roasts, turkeys and large containers of rice, take longer to cool because of the mass and volume from which heat must be removed. By reducing the volume of the food in an individual container, the rate of cooling is dramatically increased and opportunity for pathogen growth is minimized. Commercial refrigeration equipment is designed to hold cold food temperatures, not cool large masses of food.*

### 3.3.7 Cooling from Room Temperature

When potentially hazardous foods are prepared at room temperature and intended to be kept under refrigerated storage prior to serving, **should** be cooled from 20 °C (68°F) to 4°C (40°F) or less within 4 hours as outlined in the parameters of Appendix B. This includes those foods whose ingredients were canned or made from reconstituted foods.



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### 3.3.8 Room Temperature Holding

- a. Potentially hazardous foods that are intended for immediate consumption, may be displayed or held for service at room temperature (not kept on ice or other equivalent methods) but for no more than 2 hours, after which, they **should** be discarded.
- b. The foods referred to in subsection (a), above, **should** be marked with the time at which they were removed from temperature control.

#### **Rationale**

*Potentially hazardous food may be held without temperature control for short time periods because there will be no significant growth or toxin production possible in that limited time.*

### 3.3.9 Reheating Potentially Hazardous Foods for Hot Holding

- a. Potentially hazardous foods that have been cooked, then cooled to 4<sup>0</sup>C (40<sup>0</sup>F) **should** be reheated to 60<sup>0</sup>C (140<sup>0</sup>F) or higher in a manner that they will pass through the Danger Zone (4<sup>0</sup>C to 60<sup>0</sup>C (40<sup>0</sup>F to 140<sup>0</sup>F) as quickly as possible. Normally, this time **should** not exceed 2 hours. It is recommended that the food be reheated until it reaches an internal temperature of 74<sup>0</sup>C (165<sup>0</sup>F).
- b. Potentially hazardous foods that have been cooked, cooled to 4<sup>0</sup>C (40<sup>0</sup>F), reheated and then recooled to 4<sup>0</sup>C (40<sup>0</sup>F), **should** be reheated to 74<sup>0</sup>C (165<sup>0</sup>F) or higher with the total time between 4<sup>0</sup>C and 74<sup>0</sup>C (40<sup>0</sup>F and 165<sup>0</sup>F) not to exceed 2 hours.

#### **Rationale**

*Proper reheating provides a major degree of assurance that pathogens will be eliminated. It is especially effective in reducing the numbers of Clostridium perfringens that may grow in meat, poultry or gravy if these products were improperly held. The generation time for C. perfringens is very short at temperatures just below adequate hot holding.*

*The potential for growth of pathogenic bacteria is greater in reheated foods than in raw foods. This is because spoilage bacteria, which inhibit the growth of pathogens by competition on raw products, are killed during cooking. Subsequent recontamination will allow pathogens to grow without competition if temperature abuse occurs.*



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### 3.3.10 Reheating Potentially Hazardous Food for Immediate Service

- a. Potentially hazardous foods that have been cooked, and then cooled to 4C (40°F) once, can be served, if for immediate service, at any temperature, provided the time the food spends between 4C and 60C (40°F and 140°F) does not exceed 2 hours.
- b. Potentially hazardous foods that have been cooked, cooled to 4C (40°F), reheated and then recooled to 4C (40°F) **should** be served, if for immediate service, after being reheated to 74C (165°F) or higher.

#### **Rationale**

*Many foods are at risk during preparation and service. As foods are thawed, cooked, held, served, cooled, and reheated, they pass several times through the temperature "danger zone" of between 4C and 60C (40°F and 140°F). The amount of time that potentially hazardous foods are in the danger zone will have an impact on the shelf life of the product.*

### 3.3.11 Use of Microwave for Cooking or Reheating

- a. Potentially hazardous foods, cooked or reheated in microwave, **should** be rotated or stirred throughout or midway during cooking to compensate for uneven distribution of heat, and allowed to stand covered for a minimum of 2 minutes after cooking to obtain temperature equilibrium.
- b. They shall be heated an additional 14C (or an additional 20F) above the temperature specified in Appendix B to compensate for shorter cooking times.

#### **Rationale**

*The rapid increase in food temperature resulting from microwave heating does not provide the same cumulative time and temperature relationship necessary for the destruction of microorganisms as do conventional cooking methods. In order to achieve comparable lethality, the food **should** attain a higher temperature.*

*Since cold spots may exist in food cooking in a microwave oven, it is critical to measure the food temperature at multiple sites when the food is removed from the oven, and then allow the food to stand covered to allow thermal equalization and exposure.*



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## PASS ASSURANCE STANDARDS

Based on studies conducted by major universities on the TAP Series' Food Safety Manager Certification Program demonstrating exceptional certification examination pass results, TAP Series now offers that any student who fails a nationally recognized food safety certification exam will be retrained at no further cost. To qualify for the Pass Assurance Standards (PAS) program the student need only meet the following requirements.

### STUDENT REQUIREMENTS:

- Student must obtain 90% or better on each Lesson.
- Student must have taken or have retaken the sample test within 48 hours of the exam date.
- Student must complete the program within 4 months from date the student starts the training.
- Student must take the exam in the same language as the language selected for the training.

If a student completes the 4 requirements and does not pass one of the nationally recognized food safety certification exams, TAP Series will allow the student to re-take the training for free. Students are required to fax TAP a copy of their examination failure notice demonstrating the date the examination was taken. Upon verification that the PAS standards were followed the student will be reset in the TAP system. Student will then have 30 days to restudy and retake the certification examination.

We are further pleased to announce that Experior Assessments, the United States largest testing company, has also joined the PAS program. If the original examination was the Experior Assessments Certified Professional Food Manager examination, and the PAS standards were followed, then the examination will also be re-given at no further cost.

The PAS program is the only one offered in the food safety manager training and certification industry.

For further information about this cost saving feature please contact Canadian Food Safety Group at 1-866-258-0643 or e-mail [tap@canadianfoodsafety.com](mailto:tap@canadianfoodsafety.com)

## On-line Food Safety Manager's Certification program

TAP SERIES is offered exclusively in Canada by Canadian Food Safety Group



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