

**Time/Temperature Control for Safety Food** (formerly "potentially hazardous food" (PHF)).

- (1) **"Time/temperature control for safety food"** means a FOOD that requires time/temperature control for safety (TCS) to limit pathogenic microorganism growth or toxin formation.
- (2) **"Time/temperature control for safety food"** includes:
  - (a) An animal FOOD that is raw or heat-treated; a plant FOOD that is heat-treated or consists of raw seed sprouts, cut melons, cut leafy greens, cut tomatoes or mixtures of cut tomatoes that are not modified in a way so that they are unable to support pathogenic microorganism growth or toxin formation, or garlic-in-oil mixtures that are not modified in a way so that they are unable to support pathogenic microorganism growth or toxin formation; and
  - (b) Except as specified in Subparagraph (3)(d) of this definition, a FOOD that because of the interaction of its  $A_w$  and PH values is designated as Product Assessment Required (PA) in Table A or B of this definition:

**Table A. Interaction of PH and  $A_w$  for control of spores in FOOD heat-treated to destroy vegetative cells and subsequently PACKAGED**

$A_w$ values	pH: 4.6 or less	pH: > 4.6 - 5.6	pH: > 5.6
$\leq 0.92$	non-TCS FOOD*	non-TCS FOOD	non-TCS FOOD
> 0.92 - 0.95	non-TCS FOOD	non-TCS FOOD	PA**
> 0.95	non-TCS FOOD	PA	PA

\* TCS FOOD means TIME/TEMPERATURE CONTROL FOR SAFETY FOOD

\*\* PA means Product Assessment required

**Table B. Interaction of PH and  $A_w$  for control of vegetative cells and spores in FOOD not heat-treated or heat-treated but not PACKAGED**

$A_w$ values	pH: < 4.2	pH: 4.2 - 4.6	pH: > 4.6 - 5.0	pH: > 5.0
< 0.88	non-TCS food*	Non-TCS food	non-TCS food	non-TCS food
0.88 – 0.90	non-TCS food	non-TCS food	non-TCS food	PA**
> 0.90 – 0.92	non-TCS food	non-TCS food	PA	PA
> 0.92	non-TCS food	PA	PA	PA

\* TCS FOOD means TIME/TEMPERATURE CONTROL FOR SAFETY FOOD

\*\* PA means Product Assessment required

(3) **"Time/temperature control for safety food"** does not include:

(a) *An air-cooled hard-boiled EGG with shell intact, or an EGG with shell intact that is not hard-boiled, but has been pasteurized to destroy all viable salmonellae;*

(b) *A FOOD in an unopened HERMETICALLY SEALED CONTAINER that is commercially processed to achieve and maintain commercial sterility under conditions of non-refrigerated storage and distribution;*

(c) *A FOOD that because of its PH or  $A_w$  value, or interaction of  $A_w$  and PH values, is designated as a non-TCS FOOD in Table A or B of this definition;*

(d) *A FOOD that is designated as Product Assessment Required (PA) in Table A or B of this definition and has undergone a Product Assessment showing that the growth or toxin formation of pathogenic microorganisms that are reasonably likely to occur in that FOOD is precluded due to:*

(i) *Intrinsic factors including added or natural characteristics of the FOOD such as preservatives, antimicrobials, humectants, acidulants, or nutrients,*

(ii) *Extrinsic factors including environmental or operational factors that affect the FOOD such as packaging, modified atmosphere such as REDUCED OXYGEN PACKAGING, shelf life and use, or temperature range of storage and use, or*