

MOLECULAR GASTRONOMY

ADILLA SIDQI MUSLIMA Amd.PAR



7. POWDERIZING

- MALTODEXTRINE VIDEO



8. THICKENING

- XANTHAN GUM VIDEO

9. COLD SMOKING

- IMPARTING SMOKING FLAVOR TO THE FOOD/ BEVERAGES INGREDIENTS USING SMOKING GUN
- ATTRACT THE APPEARANCE OF THE DISH WHILE LEAVES AROMATIC FLAVOUR
- FLEXIBILITY ON SMALL PORTION SIZE OF FOOD
- APPLICATION VARY NOT ONLY TO USUAL “GRILLED” PRODUCT. (SMOKED SASHIMI ETC)
- FOOD SAFETY MUST BE TIGHTLY CONTROL DURING THE PROCESS

SMOKING DEVICE





COLD SMOKING | THE FOOD SAFETY

- COLD SMOKING CREATES PERFECT CONDITIONS FOR HARMFUL BACTERIA TO GROW. THE MEAT IS NOT COOKED, WHICH WOULD NORMALLY KILL OFF ANY BACTERIA.
- CURE YOUR MEAT/ FISH PRIOR IS RECOMMENDED
- COLD SMOKED FOOD IS NOT COOKED AND IS ESSENTIALLY KEPT IN THE TEMPERATURE “DANGER ZONE” FOR BACTERIAL GROWTH WHILE IT IS COLD SMOKED.
- PARASITES THAT MAY HAVE BEEN PRESENT IN THE MEAT ARE NOT KILLED BY THE COLD SMOKING PROCESS.
- THE RISK OF BOTULISM OR LISTERIA IS PARTICULARLY HIGH WHEN COLD SMOKING SAUSAGES AND FISH.
- PEOPLE WHO ARE IMMUNOCOMPROMISED, SUCH AS THOSE WHO ARE CHRONICALLY ILL, FRAIL AGED OR PREGNANT, ARE ADVISED AGAINST CONSUMING COLD SMOKED MEAT PRODUCTS.

10. FLASH FREEZING

- CONVERTING THE TEXTURE INTO FREEZING STATE (CRISP) BY EXPOSING THE FOOD INGREDIENTS INTO FREEZING DEVICE (LIQUID NITROGEN OR ANTI GRIDDLE)
- TEXTURE CHANGING RESULTED FROM EXTRA COOLING TEMPERATURE -200C
- CAN BE USE FOR ALA MINUTE ICE CREAM / SHORBET
- FLASH FREEZING ALLOWING FOOD FREEZED WITH MINIMAL ICE CRYSTAL APPEAR



LIQUID NITROGEN

- LIQUID NITROGEN IS COLORLESS, ODORLESS, FLAVORLESS, AND NON-TOXIC.
 - LIQUID NITROGEN LOOKS MUCH LIKE BOILING WATER.
 - LIQUID NITROGEN HAS A LOW VISCOSITY. IN OTHER WORDS, IT READILY FLOWS.
 - POLISH PHYSICISTS ZYGMUNT WRÓBLEWSKI AND KAROL OLSZEWSKI WERE THE FIRST TO LIQUEFY NITROGEN ON APRIL 15, 1883.
 - LIQUID NITROGEN IS PRODUCED BY FRACTIONAL DISTILLATION OF LIQUID AIR
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ANTI GRIDDLE

- THE **ANTI-GRIDDLE** IS A KITCHEN APPLIANCE THAT FLASH FREEZES OR SEMI-FREEZES FOODS PLACED ON ITS CHILLED METAL TOP.
- IT COOKS USING FREEZING TEMPERATURE (-30 C)
- REVOLUTIONARY IDEA BY GRANT ACHATZ (ALINEA RESTAURANT) AND PRODUCED BY POLYSCIENCE



VS

