

Knowledge Organiser

Food & Nutrition



Topic: Food Preparation

Key Words

Blend	Skin	Blanch	Dice	Garnish	Core	Mash	shred	Scoop	Segment

Meat

The Structure of Meat

Meat is a muscle, which consists of fibres held together by connective tissue. Tough meat is associated with longer fibres and the older the animal the tougher the meat. Muscles that do a lot of work will also give tough eat – thighs and shoulders.

Cooking of Meat

Cuts of meat from muscles that do a lot of work will need, long slow cooking methods in wet heat – braising, stewing, casseroles.

Tougher meats can also be minced to break up the connective tissue so that it cooks quickly – minced beef.

Cuts of meat that are not used so much by the animal are tenderer and can be cooked much more quickly in dry heat – grilling, frying.

Marinating & Tenderising

Marinades are added to meat before cooking to add flavour, the acid content breaks down the protein (lemon, yoghurt, wine)

Binding

Binding means holding ingredients together.

Eggs act as a binding agent and holds together burgers / fishcakes. Eggs can also enrich pastry / roux as well as to bind.

Water binds dry ingredients like flour and fat for pastry.

Breadcrumbs are a binder in sausages. Potato and flour bind fishcakes

Coating

Coating means adding an outer layer. Breadcrumbs on fish cakes and goujons.

Batters are used to protect fish. Chocolate is used as a coating (enrobe) – KitKat.



Glazing

Egg wash gives a golden shiny finish. Egg white gives a crisp, golden texture – sweet foods.

Egg yolk gives a golden brown colour – potato dishes.

Milk gives a matt golden brown colour – scones.

Sugar and water for sweet coverings. Jam gives a shiny finish on fruit flans. Arrowroot is a clear shiny gel – fruit flans.

Effects of Cooking Meat

The browning of meat is called **enzymic browning / Maillard Reaction**. It is caused by the natural sugars and proteins producing a dark colour.

As meat cooks it **coagulates**. Collagen breaks down into gelatine, making the meat tender.

Checking for Readiness

Meat joints can be tested using a temperature probe.

The following must not be eaten undercooked – chicken – 80c, pork – 75c, offal, game, burgers, sausages, kebabs.

Fish cooks quickly because the muscle is short and the connective tissue is very thin. The tissue and collagen will coagulate at 75c. Fish can be bread crumbed, battered, grilled, baked, steamed, fried, poached or steamed.

Fish can be smoked, salted, fresh and frozen.



Key words

Combined
Rubbing – in
Binding
Coating
Goujons
Enriched
Collagen
Elastin
Maillard
Gelatine
Cross
contamination
Coagulate
Enrobe
Connective
Smoking

Filleting Fish

