Coordinating Working Party on Fishery Statistics (CWP)

Handbook of Fishery Statistics

Indicative factors for converting product weight to live weight for a selection of major fishery commodities

<u>FROZEN FISH</u>

Type	Presentation	Gutted, Head On	Gutted, Head Off
Carp			
Pike		1.04	
Nile perch			
Tilapia			
Catfish			
Other freshwater fish			
Eel		1.11	
Trout		1.4	
Salmon:			
	whole	1.0	
	dressed	1.13	1.3
Flatfish:			
	dressed	1.1	1.4
	whole		
Cod		1.2	1.69
Haddock		1.14	1.61
Ocean perch			
Saithe		1.15	1.45
Hake:			
	dressed	1.16	1.55
	whole	1.0	
Alaska pollack:			
	dressed		2.17
	whole		
Capelin			
Mackerel		1.11	1.46
Jack and horse mackerel		1.09	1.65
Sardine	whole	1.0	1.43
Anchovy	whole	1.0	
Sprat	whole	1.0	
Herring	whole	1.0	1.52
Shark		1.1	2.0
Sea bream		1.1	1.47
Sea bass		1.12	1.79
Snapper		1.14	
Albacore			
Yellowfin		1.1	
Skipjack		1.1	
Bonito			1.29
Marlin		1.1	
Swordfish			1.31
Other tunas		1.16	1.36
Other marine fish			

FILLETS

Type	Presentation	Raw CF	Skin Off CF
Flatfish		2.48	2.61
Herring		1.62	2.17
Cod		2.45	3.23
	fillet		3.23
	portion		3.55
	mince		3.23
Mackerel		1.95	2.60
Haddock		2.77	2.91
	fillet		2.81
	portion		3.20
Ocean perch		2.92	3.11
Saithe		2.12	2.55
Hake		2.53	2.90
	fillet		2.90
	portion		3.19
	mince		2.90
Alaska pollack			3.78
	fillet		3.78
	mince		3.78
Salmon		2.00	2.00
	steaks	1.60	
Tuna		1.54	1.92
	loins		
Catfish		2.63	3.55
	steaks	2.40	

FISH DRIED, WHETHER OR NOT SALTED

Type	Basic Product	Conversion Factor for Basic Product	Deduced CF
Stockfish	gutted cod	1.2	1.94
Klipfish	filleted cod	2.45	3.97
Hake	fillet	2.53	4.1
Shark	fillet	2.4	3.89
Shark fins			0
Tuna	fillet	1.54	2.49
Pilchard	fillet	1.62	2.62
Tilapia	gutted	1.2	1.94
Other freshwater	fillet	2.45	4
Other fish	fillet	2.45	4

NB: the conversion factor for dried fish is taken as 1.62 times the CF for the basic product

FISH SALTED, WET OR IN BRINE

Type	Observed Conversion Factors (range)	Mean or Recommended CF
Freshwater fish		1.5
Cod	1.79 - 2.2	2.0
Other demersal	1.3 - 2.4	1.6
Herring	1.09 – 1.61	1.39
Sardine	1.3 - 1.92	1.48
Mackerel	1.16 - 2.15	1.45
Anchovy	1.33	1.33
Salmon		1.5 (assumed)
Other pelagic	1.28 – 1.5	1.39
Fish roes		1.0

All data taken from FAO Fisheries Circular No. 847 and FAO Fisheries Technical Paper. No. 309

SMOKED FISH

Type	Yield [1]	Deduced CF
Herring	0.67	1.49
Sardine	-0.67	1.49
Mackerel	0.6	1.67
Other small pelagic	-0.67	1.49
Eel	0.7	1.43
Salmon	0.52	1.92
Haddock	0.57	1.75
Skipjack		2.30 [2]
Other smoked fish	0.62 [3]	1.61

[1] From Torry Research Station, Advisory Note. No. 17 "Measures, storage rates and yields of fishery products"
[2] From FAO Fisheries Circular No. 847
[3] Assumed average (of all species)

CRUSTACEANS AND MOLLUSCS

Fresh, chilled, frozen, dried

Type	Presentation	Indicative CF[1]
Shrimps and prawns	tails (shell on)	1.63
	tails (peeled)	2.8
	meat	2.8
Lobsters	tails (shell on)	2.63
	meat	3.86
Crabs	meat	6.00
Oysters	meat	10.00
	meat (dried)	10.00
Clams	meat	6.00
	meat (dried)	10.6
Mussels	meat	6.00
Scallop	meat	9.10
	meat (dried)	10.6
Abalone	meat	2.44
Squid	whole	1.00
	raw, gutted	1.45
	raw, gutted, skin off	2.34
	raw, gutted, tentacles off	2.3
	edible meat	
	dried, whole	1.55
	dried, gutted	4.00
Cuttlefish	frozen	1.0
	frozen, gutted	1.6
	dried	1.6
Octopus	frozen	1.3
	frozen, gutted	
	dried	4.0

[1] Mainly based on mean of ranges of observed values

FISH, PREPARED OR PRESERVED, CANNED

Type	Basic CF	Processing Factor	Derived CF
Salmon: steak, bone-in	1.6	0.75	1.2
Herring: filleted	1.62	0.75	1.22
Sardine: head off, gutted	1.43	0.75	1.07
Albacore, Bonito, Other Tuna: flesh, boneless	1.92	0.75	1.44
Mackerel, Jack Mackerel: fillet	1.95	0.75	1.46
Eel: fillet	2.7	0.75	2.03

FISH PREPARATIONS IN CONTAINERS

Type	Basic CF	Processing Factor	Derived CF
Salmon, smoked			1.92
Herring, semi-preserved, Marinated, etc.): gutted	1.06	0.75	0.8
Herring, fillets, semi-preserved: fillet	1.62	0.75	1.22
Anchovy, salted: fillet	2.17	0.75	1.63
Caviar			1
Caviar substitutes			1
Fish balls: fillet	3.23	0.6	1.94
Fish cakes: fillet	3.23	0.25 to 0.35	0.80 to 1.13
Fish ham: filet	3.23	0.80 to 0.90	2.58 to 2.91
Fish sausages: fillet	3.23	0.50 to 0.65	1.62 to 2.10
Fish paste: fillet	3.23	0.70 0.75	2.26 to 2.42
Fish, fermented: fillet	3.23	0.5	1.62
Fish roes			0

CRUSTACEANS AND MOLLUSCS, CANNED

Type	Basic CF	Processing Factor	Derived CF
Shrimps	2.8	0.75	2.1
Lobster	3.86	0.75	2.9
Crab meat	6	0.75	4.5
Other crabs	6	0.75	4.5
Other crustaceans			4.0 (average figure)
Oysters	10	0.75	7.5
Scallops	9.1	0.75	6.8
Clams	6	0.75	4.5
Mussels	6	0.75	4.5
Abalone	2.44	0.75	1.83
Squid, etc.	1.45	0.75	1.09

CRUSTACEANS AND MOLLUSCS, PREPARATIONS IN CONTAINERS, WHETHER OR NOT AIRTIGHT

Type	Basic CF	Processing Factor	Derived CF
Squid, pickled	1.45	0.75	1.09
Other shellfish, pickled	4.0	0.75	3.0
Shrimp and prawn paste	2.8	0.70 to 0.75	1.96 to 2.10
Crustaceans, fermented	4.0	0.75	3.0
Molluscs, fermented	1.45	0.75	1.09
Sea urchin roes			0
Jellyfish, cured, pickled			