

Ways to cook

Tilapia can be successfully used in recipes that require Snapper, Cod, Haddock, Pompano, Flounder or Sea Bass. It can be grilled, broiled, poached, sautéed, baked, micro-waved, steamed, fried, blackened or stir-fried.

Nutritional Value

Nutritional value (per 113g serving size — 4 oz. fillet)

Calories	93
Calories from fat	09
Total fat	01g
Saturated fat	0.5
Cholesterol	55mg
Sodium	40mg
Total carbohydrate	0
Dietary fibre	0
Sugars	0
Protein	21g
Iron	2%
Calcium	6%
Vitamin A	2%
Omega 3 fatty acid	90mg



Recipe

Tilapia Calypso

Ingredients:

4 tilapia fillets, 6 oz. each
1 c. white onion, julienned
1 c. poblano chili pepper, julienned
¾ c. red bell pepper, julienned
3 cloves garlic, minced
2 tbsp. olive oil
1 tbsp. butter
4 tsp. jerk seasoning
4 tbsp. cilantro, chopped
4 orange slices, unpeeled

Preparations:

Sauté onion, peppers and garlic in oil and butter until tender; reserve.

Arrange each fillet on a square of aluminum foil.

Season each fillet with 1 tsp. jerk seasoning and cover with ½ cup onion mixture and 1 tbsp. cilantro. Top with one orange slice.

Wrap foil around fillet and seal like a pouch. Bake packets at 375 degrees for 10 minutes. Open foil packets carefully and transfer fillet to serving plate.

Note: Packets can be prepared ahead and refrigerated up to 4 hours before cooking.



CAYMAN ISLANDS
DEPARTMENT OF AGRICULTURE
ing together, growing together

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Cayman Farm-raised Tilapia

Tilapia, are being experimentally raised at the Department of Agriculture and commercially by certain private developers.. More than 80 species of Tilapia are known to exist; a few are used in aquaculture. These include *Oreochromis mossambicus*, which black in colour. *Oreochromis aureus* is white or silver and is commonly called the blue tilapia. *Oreochromis honorum* is black and white. *Oreochromis niloticus*, the fastest growing tilapia, is emerald green. *Red Niloticus*, which is being grown at the DoA, is a red strain of *Oreochromis Nitoticus* (photo)



Tilapia are native to Africa and the Middle East. They are generally freshwater fish but some types can live and actually breed in seawater. *Oreochromis niloticus* cannot survive/breed in seawater.

Tilapia are also known as sunshine snapper, cherry snapper, Nile perch and St. Peter's fish. This last name comes from the belief that this was the fish that was caught by St. Peter and multiplied by Christ to feed to the multitude .Tilapia are one of the major groups of farm raised fish in the world.

Tilapia farming and consumption are rapidly increasing in the US. In terms of quantity, tilapia is now the third most popular fish consumed in the US. Consumption reached 145 million lbs of whole weight in 2000, and has been reportedly growing at a rate of 35% per year for the past 8 years

Table 1. Facility, equipment and operating costs for 100,000 pounds per year tilapia greenhouse facility in Louisiana.

Item, Unit	No. Units	Cost/Unit	Total
Facility and Equipment			
Land, Acre	0.9	\$2,500.00	\$2,248
Permits			\$450
Greenhouse, sqft.	5,990	\$3.25	\$19,469
Heating/Ventil., sqft.	5,990	\$.50	\$2,995
Water Well	1		\$3,200
Tanks/Decking	3	\$4,224.00	\$12,672
Electrical Installation	3	\$550.00	\$1,650
Filters/Pumps	6	\$5,200.00	\$31,200
Plumbing/Fittings	3	\$720.00	\$2,160
Blowers, 2hp	3	\$580.00	\$1,740
Aerators, 1/2hp	12	\$625.00	\$7,500
Generator, Diesel	1		\$6,000
Net Pens w/hardware	18	\$300.00	\$5,400
Equipment, Tools			\$5,180
On-Site Septic System			\$1,980
Settling Pond			\$1,000
Alarm System			\$2,500
Storage			\$2,000
Office/Restroom/Etc.			\$6,000
Truck (3/4 ton), trailer			\$26,000
TOTAL			\$141,344
Operations			
Feed, lb	180,000	\$ 17	\$31,429
Fingerlings, 4.5g	75,988	\$ 21	\$15,959
Electricity	3	\$6,105.00	\$18,315
Hired Labor	1.25	\$20,000.00	\$25,000
Other (eggs, alarm monitoring, phone sw., etc.)			\$8,000
Marketing, Promotion, Travel			\$4,000
Insurance			\$2,500
TOTAL DIRECT			\$105,202
Estimated Depreciation			\$14,143
Direct Expenses and Depreciation: \$1.19 per pound of production			

Yield and cost from farm in Louisiana

The current batch was imported into the Cayman Islands in April 2006 from a production farm in Louisiana, USA as fry (baby fish) approximately 3 weeks old. They have been raised at the Department of Agriculture under controlled conditions using "city water" that has been conditioned (chlorine removed and salts added). The DoA and existing commercial farms currently grow the red genetic strain of Nile tilapia, generally considered the best for aquaculture. The fish are

harvested between eight to twelve months of age weighing between one to two pounds. They are fed an all-natural, nutritionally balanced diet and have never been treated with drugs.

Appearance of fish

The fish is pinkish in colour with occasional spots of black. They closely resemble, and could be easily mistaken for the red snapper.



Flavor of the flesh

The meat is typically white. The texture is firm, flaky and lean, has a mild, sweet flavor and accepts sauces well. However, tilapia absorbs flavor from the water they are raised in. Therefore, depending on the quality of the water that the fish have been grown in, the flesh can have a muddy or unpleasant flavor. The water source used ensures a mild, delicate taste.



Buying, Handling & Storing

Flesh should be moist and resilient. It should not have a musky odor. Don't buy frozen tilapia that has freezer burns. If mushy when thawed, discard. Shelf-life for frozen product is six months.

AQUAMAX™ DENSE 4000 RMI
 FEED FOR CATTLE, GOATS, SWINE, SHEEP AND
 TILAPIA AND CATFISH
 CAUTION - USE ONLY AS DIRECTED

GUARANTEED ANALYSIS

Crude protein (DM)	36.00%
Crude fat (DM)	10.00%
Crude fiber (max.)	5.00%
Calcium (Ca) (min.)	0.60%
Calcium (Ca) (max.)	1.50%
Phosphorus (P) (min.)	0.75%
Sodium (Na) (min.)	0.10%
Sodium (Na) (max.)	0.10%

INGREDIENTS
 Dehulled soybean meal, ground corn, wheat middlings, fish meal, porcine meat meal, porcine animal fat processed with BHA, poultry by-product meal, brewers dried yeast, DL-methionine, pyridoxine hydrochloride, L-ascorbyl-2-polyphosphate, niacinamide, sodium selenate, choline chloride, vitamin D3 supplement, calcium pantothenate, thiamine mononitrate, riboflavin supplement, vitamin E supplement, biotin, ethoxyquin (a preservative), vitamin A supplement, niacin supplement, choline chloride, vitamin B12 supplement, zinc oxide, manganese oxide, ferrous sulfate, copper sulfate, zinc sulfate, calcium iodate, calcium carbonate, calcium borogluconate, calcium carbonate.

Ruminant Meat and Bone Meal Free
4000 W 4000

DIRECTIONS
 Feed to fish. See bag for species specific feeding directions.

CAUTION
 Store in a dry, well ventilated area. Free from rodents and insects. Do not use moldy or insect-infested feed.

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