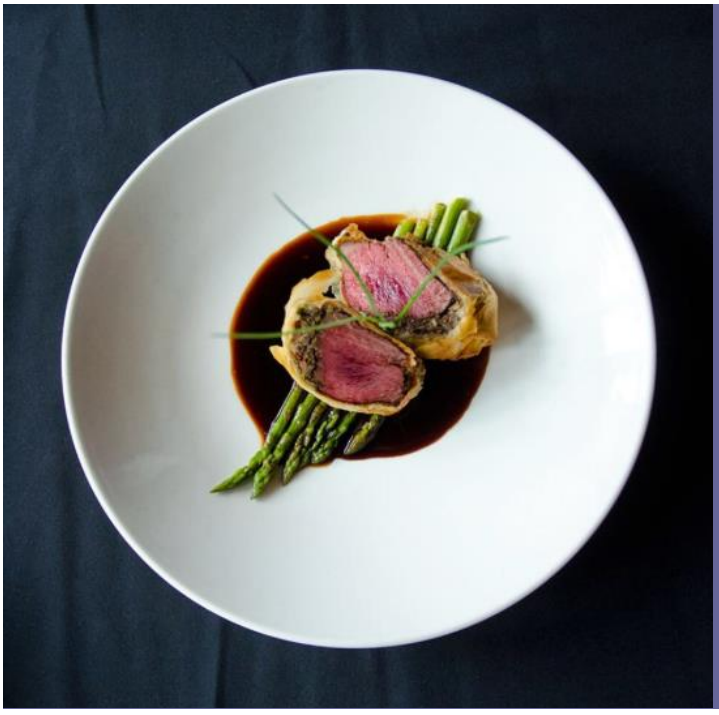
EMU PROCESSING



AEA
AMERICAN EMU ASSOCIATION

Hello esteemed meat processor,

We are the American Emu Association (AEA) and our members are in need of reputable processors across the US willing to look into the lucrative business of processing emu.

Farmers across the US have been hurt by the global pandemic and the emu industry is no exception. We have farmers, not only in your state, but also in adjacent states, desperate to find processing. We all need products for our customers.

This package is an introduction to emu processing, a way to show you a bit of what our farmers are looking for.

We can provide assistance in processing plant set up and training for butchers.

We would love to work with you.

Our goal is to help our members to have access to local processing plants that can set up processing dates with a standard slaughter package.

Phone: 541-332-0675
http://www.aea-emu.org

What's in an Emu?

Emu Meat

Emus are raised naturally with no added hormones or antibiotics. They are sustainable and can be raised on smaller farms. The meat is very low in fat, but high in protein. Emu is a dark red meat that is very mild flavored. For these reasons, emu meat is highly sought after by health conscience consumers and those suffering from food related allergies.

Emu Oil Production

EMU OIL
life just got better™

The AEA has strict standards for emu oil. Omega rich Emu Oil is a valued co-product derived from the fat of the emu. Emu oil is used in cosmetics and health related products and is highly appreciated by our customers!

The AEA Certified Emu Oil™ Program was developed to establish quality control measures to ensure that pure emu oil legitimately displaying the AEA Certified Fully Refined® seal or being marketed using the corresponding verbiage is a high quality product that meets or exceeds the industry recognized standards for Fully Refined Grade A Emu Oil as defined in the Emu Oil Trade Rules (rule 103).

Pet Products

Many of our farmers use value added cuts and even emu bones for pet products. Many farmers sell their remaining carcasses to the pet food industry.

Other Emu Products

Feathers, hides and talons. These are all potential marketable items for the farmer.

Emu Production

Most of our emu farmers engage in all aspects of emu husbandry. They have breeder pairs, collect and incubate eggs, raise chicks, grow out birds and then send birds for processing.

Emus are cold weather breeders. Their laying season starts as the days shorten. They usually lay eggs between September and April but, this may vary depending on climate and the individual breeder hen. Eggs require 50 days of incubation. If not artificially incubated, the males sit the eggs.

Young meat birds are generally ready for slaughter between 14-16 months of age with a live weight of from 80-110 pounds.

This puts the slaughter season in the late summer months. A convenient time for the farmer as it is when most of the current year's chicks are ready to be moved to the processed bird's recently emptied pens.

If processing in August, most emus will range in age from 14-19 months. What is most important for the farmer is that these birds have been able to gain enough fat after the winter. Just as any other farm animal, delay in slaughter means feed costs rise. There may be farmers looking to slaughter earlier in the summer.

Emu Meat

Emu meat is low in fat and high in protein. A very mild meat that is perfect in just about any traditional dish. Many consumers are on the hunt for sustainably raised meat products. Also, the rise of a strange meat allergy called Alpha-Gal, has sufferers looking for alternatives to mammalian meat.

Currently, emu meat is becoming more and more difficult to find as emu farms run out of product.

Emu Oil

Emu fat is a very important commodity for the farmer. Proper containment, freezing, and storing of the emu fat is paramount so that none of the fat is wasted. More on handling fat is included in this report.

The American Emu Association (AEA)

The American Emu Association represents an alternative agricultural industry, dominated by the small farmer, who is committed to humane and environmentally positive practices that produce high quality, beneficial products.

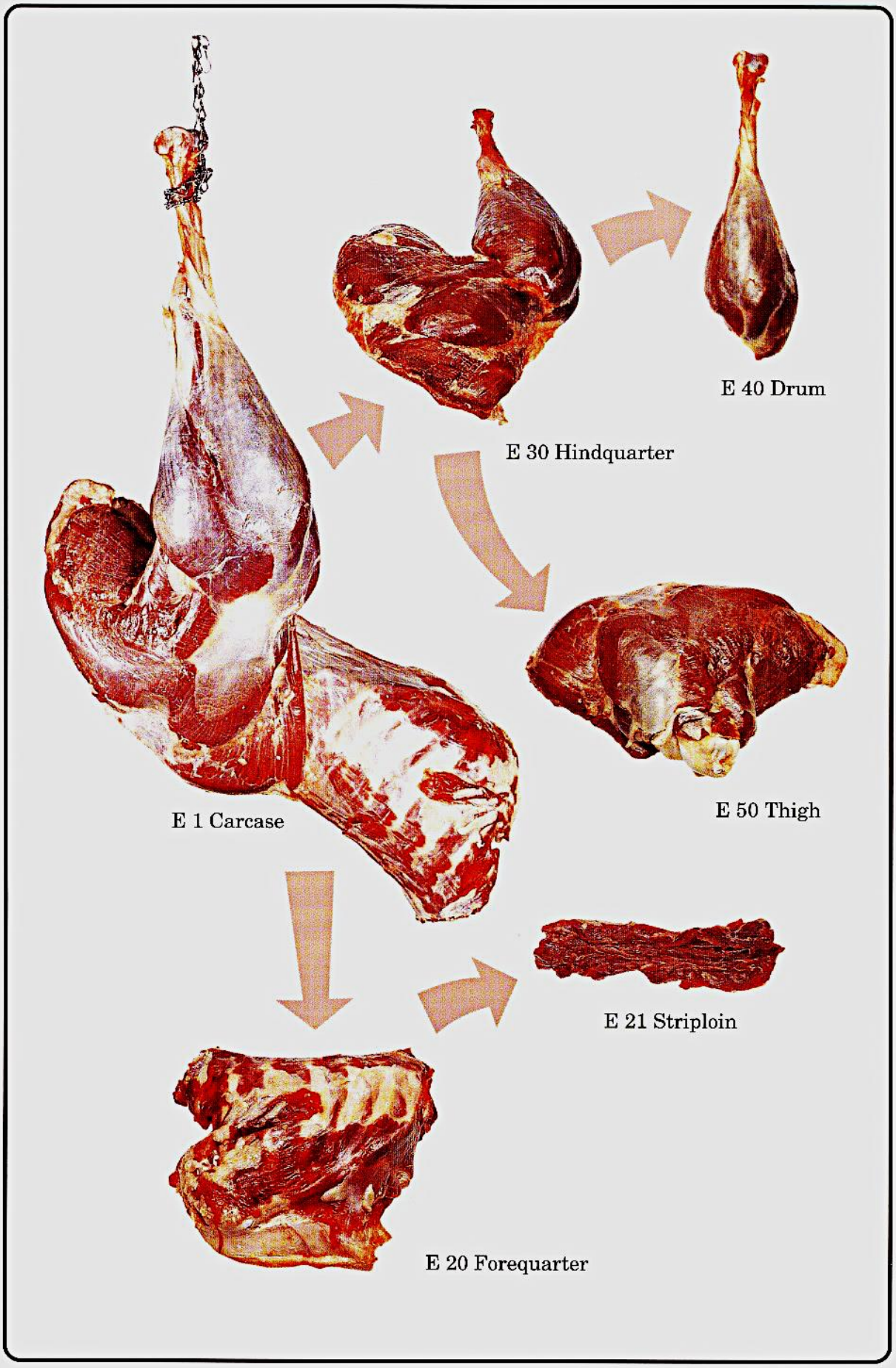
We want to help. We want to answer any questions you may have.

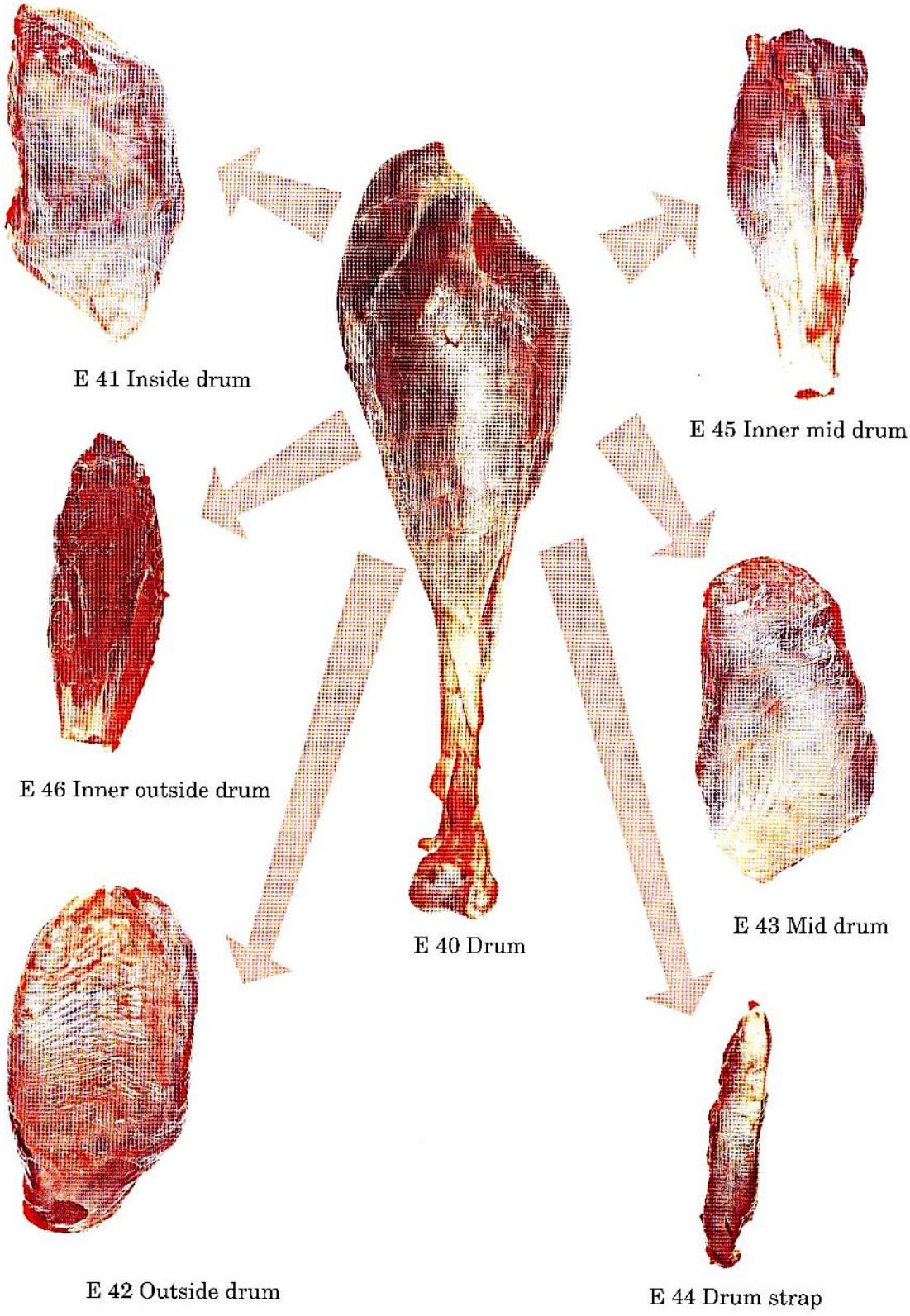
We can be reached at

Info@aea-emu.org

https://www.aea-emu.org

Emu cuts


E 40 Drum
E 30 Hindquarter
E 1 Carcase
E 50 Thigh
E 21 Striploin
E 20 Forequarter



E 41 Inside drum

E 45 Inner mid drum

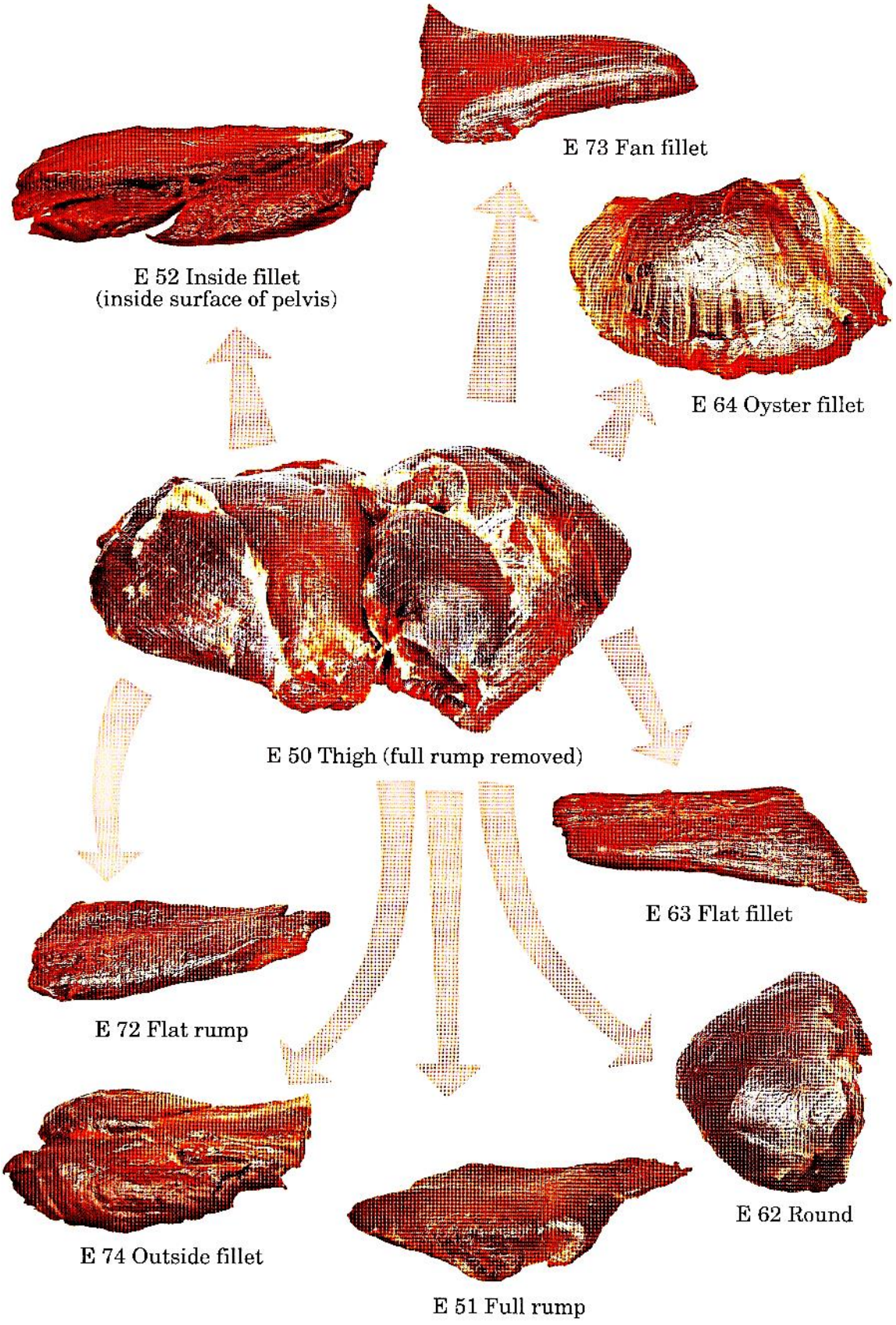
E 46 Inner outside drum

E 40 Drum

E 43 Mid drum

E 42 Outside drum

E 44 Drum strap


E 73 Fan fillet
E 52 Inside fillet
(inside surface of pelvis)
E 64 Oyster fillet
E 50 Thigh (full rump removed)
E 63 Flat fillet
E 72 Flat rump
E 62 Round
E 74 Outside fillet
E 51 Full rump

Guidelines For Handling & Storing Emu Fat

1. Remove fat and hide from carcass, separately if possible. If not, remove fat from the hide as quickly as possible to retard bacteria growth. Do not leave the hide attached to the fat. There should be a minimum of blood, meat or feathers in the fat. It is not necessary to remove the quills (feather shaft).

2. Wash the fat only if necessary to remove blood. Drain any excess water from the fat. You may use clean paper towels to absorb any water remaining on the surface of the fat. Water and blood promote the growth of harmful bacteria in the fat.

3. Do not grind the fat. Grinding destroys tissue structures and results in the release of natural enzymes causing cellular material to breakdown. Grinding also homogenizes the fat with any remaining contaminants, such as blood, making it much more difficult to remove these contaminants from the resulting oil. Adverse chemical reactions within ground fat will make it difficult, or impossible, to produce an oil meeting the current AEA "Fully Refined" standards.

4. Fat should be refrigerated immediately after removal from the carcass and frozen as quickly as possible.

5. Fat that is to be stored longer than ten days should be stored at -20 degrees.

6. Packages of fat should not be thicker than three inches. Fat that is packaged thicker than three inches does not chill as quickly in the center to properly freeze in time to retard growth of bacteria.

7. Weight of the package should not exceed twenty pounds. When shipping fat to the processor, ship via refrigerated truck or place dry ice in the containers to keep the fat frozen.

NOTE: In reference to items 4 & 6: If the birds are "home processed", be sure to consider the following --- The

"thermal mass" (the volume by weight and the temperature of the material) of both the fresh, warm fat being placed in the freezer and the amount of already frozen materials in the freezer will affect the rate at which the fresh fat will freeze.

Be sure the amount of warm, fresh fat you put in the freezer is much less than the amount of already frozen material already in the freezer. It is suggested that when putting warm fat into the freezer, you also place some ice (in bags, etc.) in the freezer to speed the chilling process.

Time factors in freezing various thicknesses of emu fat at 0°F *

Fat Thickness	3 inches	4 inches	5 inches
2 hours	32°F	49°F	52°F
3 hours	19°F	41°F	44°F
4 hours	13°F	39°F	41°F
5 hours	10°F	37°F	40°F
6 hours	4°F	36°F	39°F
7 hours	0°F	32°F	33°F
8 hours		28°F	31°F
9 hours		24°F	27°F

Quality Emu Oil Begins With Quality Fat

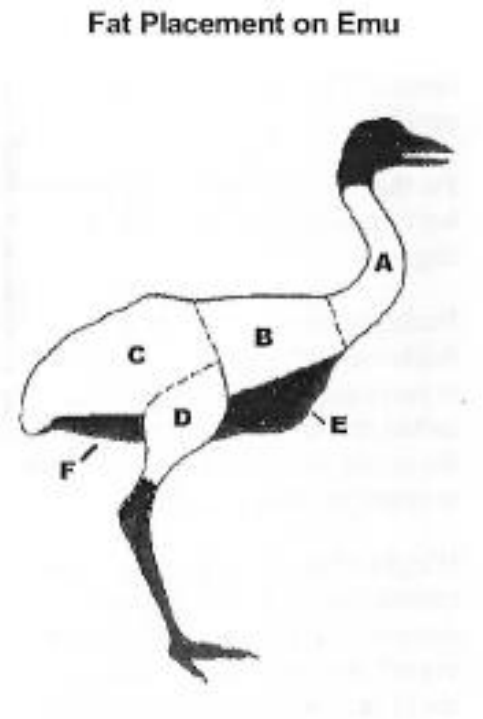
Fat exists in two places on the emu, internally and externally. Very often there will be as much internal fat as external, sometimes more. It varies from bird to bird.

External Fat

A well-fed emu will have a layer of fat over nearly the entire bird, lying like a second skin between the hide and the meat. It is just thinner in some areas than in others. The area along the leg from the drumstick down has probably the least amount of fat. The thickest amount will exist as a pad of fat on the rump. Neck fat will vary between 2 to 4 pounds depending on the bird.

Internal Fat

There is a pad of fat below the vent and another one behind the breastbone. Fat can be pulled off the major organs but not the intestines, which will tear. The intestines surround a jellyfish shaped pad of fat. The fat is attached to the intestines between two layers of membrane, above and below the fat. Use kitchen shears to separate the fat from the intestines, taking care to avoid fecal contamination.



A, B, C and D indicate areas with the most external fat on the bird. E and F indicate locations of internal fat.

Nutritional Comparison of Meats

	RDI[5]	Venison[1]	Ostrich[1]	Emu[1]	Bison[1]	Beef[2]	Turkey[2]	Elk[1]
Protein (gm)	50	26.5	26.2	28.4	24.2	25.0	27.4	26.6
Fat (gm)	<65[4]	8.2	7.1	4.7	14.8	16.4	13.2	8.4
% Saturated fat[3]	--	52	30	25	44	39	26	48
Cholesterol (mg)	<300	98	83	87	85	81	102	78
Iron (mg)	18	3.4	3.4	5.0	3.1	2.4	1.9	3.3
Calories (Kcal)	--	189	175	164	237	255	235	190
Copper (mg)	2	.13	.14	.24	.21	.09	.09	.14
Sodium (mg)	<2400	78	80	65	67	70	107	85
Magnesium (mg)	420	23.9	22.6	28.7	19.8	21	24	23.7
Manganese (mg)	--	.013	.017	.030	.010	.016	.020	.011
Phosphorus (mg)	1000	228	224	269	184	160	196	221
Potassium (mg)	--	364	323	375	306	312	270	354
Selenium (mcg)	--	10	34	44	35	19	37	17
Zinc (mg)	15	5.2	4.3	4.6	4.3	5.4	2.9	6.6
Folic Acid (mcg)	420	8.2	14	9	15.1	9	7	7.7
Vitamin B_{12} (mcg)	6	2.3	5.7	8.5	2.3	2.0	.33	v2.6
Vitamin B_6 (mg)	2	.47	.50	.83	.37	.27	.39	.42
Thiamin (mg)	1.2	.50	.21	.32	.12	.06	.05	.13
Niacin (mg)	16	9.3	6.6	8.9	4.9	4.7	4.8	5.3
Riboflavin (mg)	1.3	.33	.27	.55	.26	.26	.17	.32

Shaded areas indicate most desired in that classification

(gm=grams, mg=milligrams, mcg=micrograms, Kcal=kilocalories)

[1]= Source: University of Wisconsin-Madison, June, 2000 Alternative Meat Study funded by USDA

[2]= Source: United States Department of Agriculture Nutrient Database for Standard Reference

[3]= Percent of fat composed of saturated fatty acids

[4]= Based upon 2000 calorie diet

[5]= Reference Daily Intake (National Academy of Science)