

THE PREVIEW

Hog Butchery 101

Complete pork carcass fabrication from slaughter to shelf. Including full curing science.

75%

TO PASS

15

EXAM Q'S

5

MODULES

9

LESSONS

WHAT IS INSIDE THIS DECK

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butcherbud.com/courses

Individual Course \$28 · 5-Course Bundle \$98 · All-Access \$8/wk

COURSE SYLLABUS

All 5 Modules at a Glance

9 lessons · 29 module quiz questions · 15-question final exam · 75% to pass

MODULE 1 PORK SAFETY	MODULE 2 SIX PRIMALS	MODULE 3 BREAKDOWN	MODULE 4 CURING SCIENCE	MODULE 5 ECONOMICS
Pork-Specific Pathogens	Boston Butt & Coppa	Splitting Through Aitch	Salt & Water Activity	Whole-Hog Cutout Math
USDA Ante/Post-Mortem	Picnic Shoulder	Shoulder-Loin Break (Rib 4/5)	Nitrite Mechanism (C. bot.)	Belly to Bacon Value 2x
Trichinella & 145F Rule	Pork Loin (3 Sections)	Ham Separation at Hip	USDA 9 CFR 424.22 Limits	Guanciale 8x Multiplier
PSE vs. DFD Pork	Tenderloin Cleaning	Belly/Loin Separation	Cure #1 vs. Cure #2	Head Cheese & Chicharrones
Scald Tank Science	Belly & Spare Ribs	Membrane Removal	Dry vs. Wet Curing	Custom Processing Fees
Carcass Structure & Bones	Ham Anatomy & 5-Cut Break	Loin Chop Portioning	8-Step Bacon Production	Sausage Fat Ratios
QUIZ: 7 Questions	QUIZ: 6 Questions	QUIZ: 5 Questions	QUIZ: 6 Questions	QUIZ: 5 Questions

FINAL EXAM: 15 Questions · 75% Required to Pass · Diploma Issued on Completion

WHY THIS COURSE MATTERS

Curing Without Training Is Dangerous

SAFETY

Improperly cured meats are the primary botulinum toxin risk in food production.

LEGAL

Using Cure #1 in a product requiring Cure #2 violates USDA 9 CFR 424.22 — a criminal liability.

FINANCIAL

Exceeding 156 ppm sodium nitrite requires mandatory product recall. Undercutting it removes botulism protection.

LABELING

Selling spare ribs labeled as baby back ribs is a federal mislabeling violation — price premium fraud.

YIELD

Processors who don't calculate cutout value leave hundreds of dollars per animal on the table.

QUALITY

PSE pork in a bacon program produces watery, pale, unsaleable product — caused by pre-slaughter stress.

THE STANDARD:

USDA prosecutes mislabeling and illegal curing agent use. Compliance knowledge is not optional.

CURRICULUM OVERVIEW

What You Will Learn

Trichinella, Salmonella & Yersinia — pork pathogen control

PSE and DFD pork — causes, consequences, and curing impact

All six pork primals — yield, muscles, fabrication options

The five-muscle ham break — seam butchery step-by-step

USDA scald tank temperature science (140-145F)

Prague Powder #1 vs. #2 — why they must never be interchanged

USDA 9 CFR 424.22 — 156 ppm nitrite limit and consequences

Bacon production in 8 steps — belly to sliced slab

Whole-hog cutout value — 200 lb HCW calculation

Value multiplication: guanciale, head cheese, chicharrones (5-8x)

On completion: Butcher Bud Academy Diploma in Hog Butchery 101

MODULE 4 DEEP DIVE

Curing Science — The Most Regulated Topic in Meat Processing

REGULATORY LIMITS (9 CFR 424.22)

Agent	Max Ingoing	Product Type
Sodium Nitrite	156 ppm	Most cured meats
Sodium Nitrite	200 ppm	Dry-cured products
Sodium Nitrate	1,718 ppm	Dry-cured only
Prague Powder #1	1 oz / 25 lbs	Cooked & smoked
Prague Powder #2	1 oz / 25 lbs	Dry-cured, aged

CURE #1 vs. CURE #2 — CRITICAL DISTINCTION

Cure #1

93.75% NaCl + 6.25% sodium nitrite. Use for all cooked and smoked products (bacon, ham, Canadian bacon). Nitrite is immediately available.

Cure #2

89.75% NaCl + 6.25% sodium nitrite + 4% sodium nitrate. Use for dry-cured products aged weeks to years. Nitrate is a slow-release nitrite reservoir.

KEY CONCEPTS COVERED IN THIS COURSE

Why nitrite works

Inhibits *C. botulinum* spore germination in anaerobic environments — the primary safety mechanism in all cured meats.

Color chemistry

Nitrite + myoglobin → nitrosomyoglobin (raw) → nitrosohemochrome (heat-stable pink in cooked products).

Dry cure penetration

5-7 days per inch of thickness at 38F. A 2.75" belly requires 14-20 days minimum cure time.

Water activity

Salt reduces A_w below 0.95 — the level at which most pathogens cannot grow. Country hams reach A_w 0.85-0.92.

Smoke & heat

Cold smoke (under 90F) = flavor only. Hot smoke (165F+) = full cooking. American bacon finishes at 130F internal.

ASSESSMENT

The Final Exam — Applied Knowledge Required

EXAM STRUCTURE

Topic Area	Qs	%
Pork Safety & Regulations	3	20%
Primal Anatomy & Fabrication	3	20%
Carcass Breakdown Technique	3	20%
Curing Science & Regulations	3	20%
Economics & Calculations	3	20%
TOTAL	15	100%

- 75% required to pass (11 of 15 correct)
- 3 attempts included with enrollment
- All attempts must be used before purchasing more
- Diploma issued immediately upon passing
- Exam score recorded on student profile

SAMPLE QUESTION

Question 7 of 15

Prague Powder #2 contains sodium nitrate in addition to nitrite. Why is nitrate specifically required for dry-cured products aged for months?

- A. Provides extra Salmonella inhibition that nitrite alone cannot achieve
- B. Acts as a slow-release nitrite reservoir — reduced to nitrite by enzymes over months of aging <-- Correct**
- C. Creates the reddish-brown color of aged dry-cured products during oxidation
- D. Increases water activity to prevent excessive moisture loss during drying

MODULE 5 PREVIEW

The Zero-Waste Opportunity

8x

Jowl -> Guanciale

\$1.50/lb to \$18/lb
after 6 weeks curing

5-8x

Head -> Head Cheese

\$0.75/lb to \$6-9/lb
cooked and set

8x

Skin -> Chicharrones

\$0.50/lb to \$12/lb
rendered and puffed

~2x

Belly -> Bacon

\$91 fresh to \$176+
cured and sliced

200 LB HCW WHOLE-HOG CUTOUT — SAMPLE CALCULATION

Primal / Product	Yield (lbs)	Price/lb	Revenue
Boston Butt (bone-in)	28 lbs	\$3.99	\$112
Picnic Shoulder	20 lbs	\$2.49	\$50
Loin Chops + Tenderloin	20 lbs	\$6.50 avg	\$130
Baby Back Ribs	5 lbs	\$6.99	\$35
Belly / Bacon Program	26 lbs	\$3.49 fresh / \$7.99 bacon	\$91 - \$176+
St. Louis Spare Ribs	8 lbs	\$4.99	\$40
Fresh Ham (bone-in)	38 lbs	\$2.99	\$114
Hocks, Feet, Variety Meats	14 lbs	\$2.00 avg	\$28
Fat, Lard, Bones	41 lbs	\$0.75	\$31
TOTAL	200 lbs	--	\$631 - \$716+

Carcass cost at \$1.35/lb HCW = \$270. Gross margin before curing: \$361. After bacon program: \$446+

COURSE OVERVIEW

Hog Butchery 101 — By the Numbers

9**Lessons**

Detailed text-based reading content written at USDA regulatory depth

29**Quiz Questions**

Module quizzes with immediate feedback and full explanations

15**Final Exam Qs**

Applied questions including calculations and regulatory citations

75%**To Pass**

Professional standard — surface reading alone will not pass this exam

\$28**Individual Price**

Own the course forever — or \$8/week for all 23+ courses

Special emphasis on curing science

The most regulated and most dangerous topic in professional meat processing.

Written by practitioners

Every lesson is anchored to actual USDA FSIS regulations — CFR citations verified and included throughout.

Real economics

Cutout value math, value multiplication tables, and custom processing fee structures — calculable, actionable numbers.

SAMPLE EXAM QUESTION

What Difficulty to Expect

Question 4 of 15 · Module 5: Economics

A farmer sells a 265 lb live hog at \$3.50/lb live weight. The processor charges \$0.70/lb HCW. At 71% dressing, what is the total cost to the customer?

- A. \$927.50 $265 \times \$3.50 =$ live cost only — ignores processing fee
- B. \$1,059.43** Live: $\$927.50 +$ Processing: $265 \times 0.71 \times \$0.70 = \$131.71 = \$1,059.21$
- C. \$994.80 Incorrect dressing percentage applied
- D. \$1,150.00 Applies wrong rate to wrong weight

WHY THIS QUESTION FORMAT: Applied math questions require actual calculation — you cannot guess or approximate. Every question explains the correct method.

BEFORE YOU ENROLL

Free Resources Available to Everyone

This Pitch Deck (PDF)

Download and share freely — with your farm customers, employees, or team. No signup required.

Academy One-Pager (PDF)

1-page overview of all 23+ Butcher Bud Academy courses, pricing tiers, and how the diploma works.

Study Guide PDF

Condensed reference: cure agent limits, key temperatures, regulatory citations. Available to all students.

Course White Paper (PDF)

3-page deep-dive: full syllabus, curing regulatory limits table, whole-hog value multiplication table.

Beef Breakdown White Paper

Companion course document covering the full beef curriculum — available alongside the hog materials.

First Lesson Preview

Read the first lesson of any course without creating an account. No credit card required to browse.

All PDF resources available at butcherbud.com/courses - No signup required

WHY BUTCHER BUD ACADEMY

The Standard Other Courses Don't Reach

1 Actual Curing Chemistry

Not "add some pink salt" — mechanism of *C. botulinum* spore inhibition, 156 ppm USDA limit, Cure #1 vs. #2 distinction. Every curing session is anchored to 9 CFR 424.22.

2 Verified Regulatory Citations

9 CFR 424.22, FMIA 21 U.S.C. Sections 601-695, NPPC grading standards — cited by name, number, and substance throughout every lesson.

3 Applied Economics

Whole-hog cutout math, value multiplication tables, custom processing fee structures. Not theory — calculable numbers you can use on Monday morning.

4 A Diploma Worth Earning

75% required. 3 attempts. Exam questions are calibrated so surface-level reading does not produce a passing score. It means something when you pass.

Students who complete Butcher Bud Academy courses are genuinely prepared for professional pork fabrication — not just familiar with the concepts.

HOG BUTCHERY 101

Enroll Today

- 9 lessons across 5 modules
- 29 module quiz questions
- 15-question final exam
- 3 exam attempts included
- Diploma on passing (75%)
- Lifetime access to course content
- All free PDF resources included

ENROLLMENT OPTIONS

\$28**This Course Only**

Own Hog Butchery 101 forever.
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Note: subscription cancellation permanently locks All-Access pricing. Re-enrollment requires individual pricing at \$28/course.