The 240+ column below shows actual feed mix by weight to mix 2,000 lbs. of feed for raising pigs for market. This chart was developed by an animal nutritionist at Spencer Ag for one specific farmer.

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| **Ingredient Detail (As Fed)** |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **|** | **Ingredient Name** | **50-80** | **80-120** | **120-160** | **160-200** | **200-240** | **240+** | **Paylean** | |  | Corn Grain - Ground - Fine | 1,404.93 | 1,509.69 | 1,557.26 | 1,627.10 | 1,696.95 | 1,769.07 | 1,561.64 | |  | Soybean Meal 46.5% | 524.54 | 420.97 | 385.26 | 316.21 | 247.17 | 180.70 | 384.85 | |  | Terminal Base | 60.00 | 60.00 | 50.00 | 50.00 | 50.00 | 45.00 | 45.00 | |  | Lysine Monohydrochloride | 3.49 | 3.22 | 2.52 | 2.35 | 2.17 | 2.22 | 3.35 | |  | L-Threonine | 3.48 | 2.84 | 2.14 | 1.78 | 1.43 | 1.01 | 2.34 | |  | Charger Zyme | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | |  | Methionine - DL | 1.57 | 1.27 | 0.82 | 0.55 | 0.29 |  | 0.81 | |  | **Total** | 2,000.00 | 2,000.00 | 2,000.00 | 2,000.00 | 2,000.00 | 2,000.00 | 2,000.00 | | |
|  |
| |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Nutrient Analysis(As Fed)** | | | |  |  |  |  |  |  |  | |  |  | **Item** |  | **50-80** | **80-120** | **120-160** | **160-200** | **200-240** | **240+** | **Paylean** | | 0 | 2 | Protein | % | 18.32 | 16.28 | 15.53 | 14.18 | 12.82 | 11.52 | 15.57 | | 1 | 41 | Fat | % | 3.43 | 3.45 | 3.44 | 3.45 | 3.45 | 3.47 | 3.46 | | 2 | 407 | Lysine | % | 1.25 | 1.10 | 1.00 | 0.90 | 0.80 | 0.70 | 1.02 | | 3 | 19 | Calcium | % | 0.76 | 0.75 | 0.64 | 0.63 | 0.62 | 0.55 | 0.58 | | 4 | 20 | Phosphorus | % | 0.55 | 0.53 | 0.49 | 0.48 | 0.47 | 0.44 | 0.48 | | 5 | 16 | Vitamin A | IU/lb | 3,030.00 | 3,030.00 | 2,525.00 | 2,525.00 | 2,525.00 | 2,272.50 | 2,272.50 | | 6 | 17 | Vitamin D | IU/lb | 454.50 | 454.50 | 378.75 | 378.75 | 378.75 | 340.88 | 340.88 | | 7 | 18 | Vitamin E | IU/lb | 12.39 | 12.34 | 10.30 | 10.26 | 10.23 | 9.18 | 9.29 | | |
|  |

1. Predict what changes might be necessary for feeding a hog to be shown at the fair. Explain your changes.

Based on the provided information, the best feed ration for a show pig would be the Paylean feed mix. Paylean® is the trade name for Elanco’s ractopamine hydrochloride. Paylean® shifts nutrients into synthesizing more lean or muscle, and away from fat deposition. Paylean® does not increase the number of muscle fibers, but rather increases the size of existing muscle fibers.

1. Look up actual costs of ingredients and determine the overall cost of a ton of feed.

Answers may vary based on current market prices.