

EXAMPLE:**Winter Range or Drought Supplement****Low-CP**

Goal: Low-cost supplement that acts as a supplement and a short-term plan to relace some of the rangeland forage intake during times of shortages

Category	Ingredient	% IN DIET	CP, %	TOTAL CP	Ingredient Notes
Roughage/Fiber	Juniper Fiber	30.00	3.00	0.90	
Roughage/Fiber	Ground hay	4.00	10.00	0.40	Must ensure that you get a good grind to reduce sorting. Alfalfa is not needed. Suggest using a grass hay or crop by-product such as corn stalks. For a rangeland supplement, you may consider not adding any additional roughage, other than juniper.
Energy and Protein	DDGS (Dried Distillers Grains)	30.00	27.00	8.10	Keep an eye on feed refusals, especially with sheep and goats. I've seen sheep and goats both sort for and against DDGS. If sorting against, the color of the feed refusals will be the color of your DDGS. If sorting becomes an issue, then you may need to limit feed and/or feed twice per day. Consider collecting and reusing refusals but be cautious about doing this for multiple reasons.
Energy	Sorghum grain (milo): cracked	5.00	11.50	0.58	You should "shoot for" a minimum of 70% cracked with limited fines (dust). You should also consider deleting this ingredient, depending upon price. If you delete this, then add the deleted percentage to DDGS amount. You could use corn but corn is basically pricing itself out of rations where milo is regionally available.
Energy	Bakery byproduct	25.00	11.80	2.95	Highly palatable. Has an awesome smell. The consistency/look is fairly similar to cottonseed meal. Energy value is similar to greater than corn and milo. Depending upon cost, you should consider increasing the amount used and eliminating milo. One thing to be cautious about is rodents and amount of time it will be stored.
Nitrogen	Ammon. Cl	1.00	163.00	1.63	I like to use in rangeland supplements to increase rumen degradable N. If you go above 1% in a ration, be cautious because overconsumption can become a problem, especially in young animals and especially when forages are limited or dormant.
Mineral	Salt	1.00	0.00	0.00	If needed, you can add up to 3% salt but there is a balancing act you have to play; adding salt vs. not limiting consumption (unless this is your goal, which is an entirely different subject that would require additional discussions).
Mineral	Cal-Phos	2.00	0.00	0.00	In many instances, you don't need additional calcium in a rangeland supplement, thus you can delete Cal-Phos and just increase the P in your mineral package. Also, when using DDGS, you may not even need the additional phosphorus but it won't hurt to add.
Mineral	Trace Mineral	2.00	0.00	0.00	You should work with a local supplier to put together a good trace-mineral package based upon your location, animal species, animal class, past and current rangeland conditions. However, don't be "sold" on "foo-foo" dust (minerals or additives that you really don't need, which greatly increases the price).
		100.0		14.6	

EXAMPLE:**Winter Range or Drought Supplement****Medium-CP**

Goal: Medium-cost supplement that has fairly good CP. However, one must calculate cost/lb. of protein and total cost/lb. of supplement intake needed to supply the required amount of protein the animal needs and then compare that to a high-CP (e.g., 30% or greater) supplement. In situations where forage is available and you just need to supplement with protein, the high-CP supplement is the better deal for you.

Category	Ingredient	% IN DIET	CP, %	TOTAL CP	Ingredient Notes
Roughage/Fiber	Juniper Fiber	20.00	3.00	0.60	This could go as high as 30% but you will need to add additional protein to keep the mixture above 20% CP.
Energy and Protein	DDGS (Dried Distillers Grains)	55.00	27.00	14.85	Keep an eye on feed refusals, especially with sheep and goats. I've seen sheep and goats both sort for and against DDGS. If sorting against, the color of the feed refusals will be the color of your DDGS. If sorting becomes an issue, then you may need to limit feed and/or feed twice per day. Consider collecting and reusing refusals but be cautious about doing this for multiple reasons.
Energy	Bakery byproduct	17.00	11.80	2.01	Highly palatable. Has an awesome smell. The consistency/look is fairly similar to cottonseed meal. Energy value is similar to greater than corn and milo. Depending upon cost, you should consider increasing the amount used and eliminating milo. One thing to be cautious about is rodents and amount of time it will be stored.
Nitrogen	Ammon. Cl	2.00	163.00	3.26	I like to use in rangeland supplements to increase rumen degradable N. If you go above 1% in a ration, be cautious because overconsumption can become a problem, especially in young animals and especially when forages are limited or dormant.
Mineral	Salt	2.00	0.00	0.00	If needed, you can add up to 3% salt but there is a balancing act you have to play; adding salt vs. not limiting consumption (unless this is your goal, which is an entirely different subject that would require additional discussions).
Mineral	Cal-Phos	2.00	0.00	0.00	In many instances, you don't need additional calcium in a rangeland supplement, thus you can delete Cal-Phos and just increase the P in your mineral package. Also, when using DDGS, you may not even need the additional phosphorus but it won't hurt to add.
Mineral	Trace Mineral	2.00	0.00	0.00	You should work with a local supplier to put together a good trace-mineral package based upon your location, animal species, animal class, past and current rangeland conditions. However, don't be "sold" on "foo-foo" dust (minerals or additives that you really don't need, which greatly increases the price).
		100.0		20.7	

EXAMPLE:**Beef Cattle Backgrounding Diet****Goal:** To get a minimum of 2 lb. of gain/day to backgrounded feedlot cattle.

Category	Ingredient	% IN DIET	CP, %	TOTAL CP	Ingredient Notes
Roughage/Fiber	Juniper Fiber	15.00	3.00	0.45	Redeemer's Juniper Fiber has a small particle size. Thus, it is highly advisable to use a secondary roughage (fiber) in feedlot cattle diets. You should consider bumping Juniper Fiber up to 20% of the total diet, depending on cost of other fiber sources.
Roughage/Fiber	Ground hay	15.00	10.00	1.50	Alfalfa is not needed. Use a course-ground hay or crop by-product such as corn stalks.
Energy and Protein	DDGS (Dried Distillers Grains)	25.00	27.00	6.75	Most research has shown a safe, maximum inclusion rate of less than 30 to 35% of total diet.
Energy	Cracked sorghum grain or cracked or steam-flaked corn	25.00	11.50	2.88	
Energy	Bakery byproduct	12.00	11.80	1.42	Highly palatable; smells great. The consistency/look is similar to cottonseed meal. Energy value is similar to greater than corn and milo. Depending upon cost, you should consider increasing the amount used and eliminating milo. One thing to be cautious about is rodents and amount of time it will be stored.
Nitrogen	Ammon. Cl	1.00	163.00	1.63	Use only if you need to increase rumen degradable N. There is more to be said regarding this ingredient but in general, you may want to consider deleting this ingredient because the diet already has enough N.
Mineral	Salt	1.00	0.00	0.00	This can be increased to 2 to 2.5% if your situation calls for it.
Mineral	Limestone	2.00	0.00	0.00	DDGS are high in P, thus most of the time it is wise to add some Ca to the diet.
Mineral	Cal-Phos	2.00	0.00	0.00	In many instances, you don't need additional calcium in a rangeland supplement, thus you can delete Cal-Phos and just increase the P in your mineral package. Also, when using DDGS, you may not even need the additional phosphorus but it won't hurt to add.
Mineral	Trace Mineral	2.00	0.00	0.00	You should work with a local supplier to put together a good trace-mineral package put together. However, don't be "sold" on "foo-foo" dust (minerals or additives that you really don't need, which greatly increases the price).
		100.0		14.6	