

Tov simentalke junadi

Period tova, meseci	Uzrast, meseci	Kategorija	Prirast, kg/dan	TM, kg
3-6	4	Podmladak	1.20	150-250
6-8	7	Podmladak	1.45	250-350
8-10	9	Godišnjak	1.50	350-450
10-14	12	Godišnjak	1.50	450-600

Tov angus junadi

Period tova, meseci	Uzrast, meseci	Kategorija	Prirast, kg/dan	TM, kg
6-9	7	Podmladak	1.50	220-350
9-14	12	Godišnjak	1.70-1.80	350-600

Table O1. Summary			<i>Type: Growing/Finishing</i>			<i>Solution: 1:= Empirical</i>		
SBW:	192 kg	Breed:	Breed: Simmental					
MBW:	1150 kg	Sex:	Bull	BCS:	5	Age:	4 mo	
Metabolizable Energy (ME)			Metabolizable Protein (MP)					
	Available	Required	Balance	Available	Required	Balance		
	Mcal/d	Mcal/d	Mcal/d	g/d	g/d	g/d		
Diet	11.5	11.5	0.0	453.75	452.96	0.79		
Maintenance	11.5	8.5	3.0	453.75	196.00	257.75		
Pregnancy	3.0	0.0	3.0	257.75	0.00	257.75		
Lactation	3.0	0.0	3.0	257.75	0.00	257.75		
Growth	3.0	3.0	0.0	257.75	256.96	0.79		
Reserves	0.0	0.0	0.0	0.79	0.00	0.79		
ME allowable gain	0.849 kg/d			DMI actual	4.44 kg/d			
MP allowable gain	0.851 kg/d			DMI predicted	4.37 kg/d			
				Cost per day	0.00 \$/d			
				Cost per product				
Diet Characteristics				TDN	71.63 % DM			
Dry matter	52.21 %AF			ME	2.590 Mcal/kg			
Forage	48.67 %DM			NEma	1.677 Mcal/kg			
Crude protein	17.47 %DM			NEga	1.062 Mcal/kg			
Fat	3.18 %DM			1st limiting AA: MET	-16.74 % of req.			
Ash	6.96 %DM			2nd limiting AA: HIS	-9.49 % of req.			
Carbohydrate (CHO)	72.38 %DM			Protein	g/d	%CP	%DM	
Nonfiber CHO	40.52 %DM			RDP	430.96	55.51	9.70	
Sugars	4.12 %DM			RUP	345.37	44.49	7.77	
Starch	27.56 %DM			RDP:RUP	1.25			
NDF	31.86 %DM			Ruminal N balance	17.82 g N/d			
Lignin	3.75 %DM			Ruminal N balance	34.84 % of req.			
peNDF	14.10 %DM			TDN allowable MCP	0.32 kg/d			
Ruminal pH	6.00			RDP balance	0.11 kg/d			
Source of Metabolizable Protein				RDP allowable MCP	0.32 kg/d			
Bacteria	45.1%	204.54 g/d		Methane Production				
Feed	54.9%	249.21 g/d		6.502 % GE		1.24 Mcal/d		
Total	453.75 g/d			5.82 mol/d		20.97 g/kg DM		
				As-fed		Dry matter		
#	ID	Feed		kg/d	%	kg/d	%	
1	5	Alfalfa hay		0.5	5.9%	0.435	9.8%	
2	6	Alfalfa haylage		3.0	35.3%	1.231	27.7%	
3	50	Corn silage		3.0	35.3%	0.992	22.3%	
4	45	Corn grain		0.8	9.4%	0.698	15.7%	
5	10	Barley grain		0.7	8.2%	0.628	14.1%	
6	136	Soybean meal, heated		0.5	5.9%	0.449	10.1%	
7	804	Calcium carbonate		0.005	0.1%	0.005	0.1%	
8	813	Dicalcium phosphate		0.005	0.1%	0.005	0.1%	
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Total				8.510	100.0%	4.443	100.0%	

Table O1. Summary			<i>Type: Growing/Finishing</i>			<i>Solution: 1:= Empirical</i>		
SBW:	288 kg	Breed:	Breed: Simmental					
MBW:	1150 kg	Sex:	Bull	BCS:	5	Age:	7 mo	
Metabolizable Energy (ME)			Metabolizable Protein (MP)					
	Available	Required	Balance	Available	Required	Balance		
	Mcal/d	Mcal/d	Mcal/d	g/d	g/d	g/d		
Diet	16.6	16.6	0.0	571.32	571.32	0.00		
Maintenance	16.6	11.5	5.1	571.32	265.66	305.66		
Pregnancy	5.1	0.0	5.1	305.66	0.00	305.66		
Lactation	5.1	0.0	5.1	305.66	0.00	305.66		
Growth	5.1	5.1	0.0	305.66	305.66	0.00		
Reserves	0.0	0.0	0.0	0.00	0.00	0.00		
ME allowable gain	1.022 kg/d			DMI actual	6.49 kg/d			
MP allowable gain	1.022 kg/d			DMI predicted	6.58 kg/d			
				Cost per day	0.00 \$/d			
				Cost per product				
Diet Characteristics				TDN	70.87 % DM			
Dry matter	46.85 %AF			ME	2.562 Mcal/kg			
Forage	53.88 %DM			NEma	1.653 Mcal/kg			
Crude protein	14.65 %DM			NEga	1.040 Mcal/kg			
Fat	2.94 %DM			1st limiting AA: MET	-13.74 % of req.			
Ash	6.67 %DM			2nd limiting AA: HIS	-13.40 % of req.			
Carbohydrate (CHO)	75.74 %DM			Protein	g/d	%CP	%DM	
Nonfiber CHO	42.01 %DM			RDP	538.02	56.59	8.29	
Sugars	3.74 %DM			RUP	412.76	43.41	6.36	
Starch	29.24 %DM			RDP:RUP	1.30			
NDF	33.73 %DM			Ruminal N balance	15.24 g N/d			
Lignin	3.88 %DM			Ruminal N balance	21.51 % of req.			
peNDF	15.45 %DM			TDN allowable MCP	0.44 kg/d			
Ruminal pH	6.05			RDP balance	0.10 kg/d			
Source of Metabolizable Protein				RDP allowable MCP	0.44 kg/d			
Bacteria	49.6%	283.39 g/d		Methane Production				
Feed	50.4%	287.94 g/d		6.235 % GE		1.72 Mcal/d		
Total		571.32 g/d		8.07 mol/d		19.91 g/kg DM		
				As-fed		Dry matter		
#	ID	Feed		kg/d	%	kg/d	%	
1	5	Alfalfa hay		0.5	3.6%	0.435	6.7%	
2	6	Alfalfa haylage		5.0	36.1%	2.052	31.6%	
3	50	Corn silage		6.1	44.0%	2.017	31.1%	
4	45	Corn grain		1.4	10.1%	1.221	18.8%	
5	10	Barley grain		0.6	4.3%	0.538	8.3%	
6	136	Soybean meal, heated		0.25	1.8%	0.224	3.5%	
7	804	Calcium carbonate						
8	813	Dicalcium phosphate						
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Total				13.850	100.0%	6.488	100.0%	

Table O1. Summary			<i>Type: Growing/Finishing</i>			<i>Solution: 1:= Empirical</i>		
SBW:	384 kg	Breed:	Breed: Simmental					
MBW:	1150 kg	Sex:	Bull	BCS:	5	Age:	9 mo	
Metabolizable Energy (ME)			Metabolizable Protein (MP)					
	Available	Required	Balance	Available	Required	Balance		
	Mcal/d	Mcal/d	Mcal/d	g/d	g/d	g/d		
Diet	22.5	22.5	0.0	725.36	724.87	0.48		
Maintenance	22.5	14.2	8.4	725.36	329.63	395.72		
Pregnancy	8.4	0.0	8.4	395.72	0.00	395.72		
Lactation	8.4	0.0	8.4	395.72	0.00	395.72		
Growth	8.4	8.4	0.0	395.72	395.24	0.48		
Reserves	0.0	0.0	0.0	0.48	0.00	0.48		
ME allowable gain	1.340 kg/d			DMI actual	8.59 kg/d			
MP allowable gain	1.342 kg/d			DMI predicted	8.68 kg/d			
				Cost per day	0.00 \$/d			
				Cost per product				
Diet Characteristics				TDN	72.59 % DM			
Dry matter	47.40 %AF			ME	2.624 Mcal/kg			
Forage	46.49 %DM			NEma	1.707 Mcal/kg			
Crude protein	13.07 %DM			NEga	1.088 Mcal/kg			
Fat	3.03 %DM			1st limiting AA: HIS	-15.62 % of req.			
Ash	5.75 %DM			2nd limiting AA: MET	-11.34 % of req.			
Carbohydrate (CHO)	78.14 %DM			Protein	g/d	%CP	%DM	
Nonfiber CHO	46.32 %DM			RDP	630.69	56.20	7.35	
Sugars	3.74 %DM			RUP	491.56	43.80	5.73	
Starch	35.09 %DM			RDP:RUP	1.28			
NDF	31.83 %DM			Ruminal N balance	7.31 g N/d			
Lignin	3.46 %DM			Ruminal N balance	7.82 % of req.			
peNDF	16.13 %DM			TDN allowable MCP	0.58 kg/d			
Ruminal pH	6.07			RDP balance	0.05 kg/d			
Source of Metabolizable Protein				RDP allowable MCP	0.58 kg/d			
Bacteria	51.6%	374.38 g/d		Methane Production				
Feed	48.4%	350.97 g/d		5.897 % GE		2.16 Mcal/d		
Total	725.36 g/d			10.15 mol/d		18.91 g/kg DM		
				As-fed		Dry matter		
#	ID	Feed		kg/d	%	kg/d	%	
1		5 Alfalfa hay		0.5	2.8%	0.435	5.1%	
2		6 Alfalfa haylage		5.0	27.6%	2.052	23.9%	
3		50 Corn silage		9.1	50.2%	3.009	35.1%	
4		45 Corn grain		2.5	13.8%	2.18	25.4%	
5		10 Barley grain		0.8	4.4%	0.718	8.4%	
6		136 Soybean meal, heated		0.21	1.2%	0.188	2.2%	
7		804 Calcium carbonate		0.003	0.0%	0.003	0.0%	
8		813 Dicalcium phosphate						
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Total				18.113	100.0%	8.586	100.0%	

Table O1. Summary			<i>Type: Growing/Finishing</i>			<i>Solution: 1:= Empirical</i>	
SBW:	504 kg	Breed:	Breed: Simmental				
MBW:	1150 kg	Sex:	Bull	BCS:	5	Age:	12 mo
Metabolizable Energy (ME)			Metabolizable Protein (MP)				
	Available	Required	Balance	Available	Required	Balance	
	Mcal/d	Mcal/d	Mcal/d	g/d	g/d	g/d	
Diet	29.6	29.6	0.0	861.32	862.93	-1.61	
Maintenance	29.6	17.4	12.2	861.32	404.21	457.11	
Pregnancy	12.2	0.0	12.2	457.11	0.00	457.11	
Lactation	12.2	0.0	12.2	457.11	0.00	457.11	
Growth	12.2	12.2	0.0	457.11	458.72	-1.61	
Reserves	0.0	0.0	0.0	0.00	1.61	-1.61	
ME allowable gain	1.571 kg/d			DMI actual	11.28 kg/d		
MP allowable gain	1.565 kg/d			DMI predicted	11.39 kg/d		
				Cost per day	0.00 \$/d		
				Cost per product			
Diet Characteristics				TDN	72.51 % DM		
Dry matter	43.94 %AF			ME	2.621 Mcal/kg		
Forage	43.28 %DM			NEma	1.706 Mcal/kg		
Crude protein	11.04 %DM			NEga	1.088 Mcal/kg		
Fat	3.20 %DM			1st limiting AA: HIS	-19.87 % of req.		
Ash	5.02 %DM			2nd limiting AA: LYS	-8.90 % of req.		
Carbohydrate (CHO)	80.74 %DM			Protein	g/d	%CP	%DM
Nonfiber CHO	48.09 %DM			RDP	728.90	58.56	6.46
Sugars	3.44 %DM			RUP	515.81	41.44	4.57
Starch	38.36 %DM			RDP:RUP	1.41		
NDF	32.65 %DM			Ruminal N balance	-4.02 g N/d		
Lignin	3.15 %DM			Ruminal N balance	-3.33 % of req.		
peNDF	20.40 %DM			TDN allowable MCP	0.75 kg/d		
Ruminal pH	6.24			RDP balance	-0.03 kg/d		
Source of Metabolizable Protein				RDP allowable MCP	0.73 kg/d		
Bacteria	56.0%	482.59 g/d		Methane Production			
Feed	44.0%	378.73 g/d		6.012 % GE		2.90 Mcal/d	
Total		861.32 g/d		13.62 mol/d		19.33 g/kg DM	
				As-fed		Dry matter	
#	ID	Feed		kg/d	%	kg/d	%
1	5	Alfalfa hay		0.5	1.9%	0.435	3.9%
2	6	Alfalfa haylage		3.9	15.2%	1.601	14.2%
3	50	Corn silage		17.2	67.0%	5.688	50.4%
4	45	Corn grain		3.7	14.4%	3.227	28.6%
5	10	Barley grain		0.2	0.8%	0.179	1.6%
6	136	Soybean meal, heated		0.14	0.5%	0.126	1.1%
7	804	Calcium carbonate		0.02	0.1%	0.02	0.2%
8	813	Dicalcium phosphate					
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Total				25.660	100.0%	11.276	100.0%

Table O1. Summary			<i>Type: Growing/Finishing</i>			<i>Solution: 1:= Empirical</i>	
SBW:	274 kg	Breed:	Breed: Angus				
MBW:	950 kg	Sex:	Bull	BCS:	5	Age:	7 mo
Metabolizable Energy (ME)			Metabolizable Protein (MP)				
	Available	Required	Balance	Available	Required	Balance	
	Mcal/d	Mcal/d	Mcal/d	g/d	g/d	g/d	
Diet	16.2	16.2	0.0	625.71	627.07	-1.36	
Maintenance	16.2	9.2	7.0	625.71	255.64	370.07	
Pregnancy	7.0	0.0	7.0	370.07	0.00	370.07	
Lactation	7.0	0.0	7.0	370.07	0.00	370.07	
Growth	7.0	7.0	0.0	370.07	371.43	-1.36	
Reserves	0.0	0.0	0.0	0.00	1.36	-1.36	
ME allowable gain	1.253 kg/d			DMI actual	6.27 kg/d		
MP allowable gain	1.248 kg/d			DMI predicted	6.23 kg/d		
				Cost per day	0.00 \$/d		
				Cost per product			
Diet Characteristics				TDN	71.54 % DM		
Dry matter	48.94 %AF			ME	2.586 Mcal/kg		
Forage	47.76 %DM			NEma	1.675 Mcal/kg		
Crude protein	17.19 %DM			NEga	1.061 Mcal/kg		
Fat	3.39 %DM			1st limiting AA: MET	-17.31 % of req.		
Ash	6.66 %DM			2nd limiting AA: HIS	-10.09 % of req.		
Carbohydrate (CHO)	72.77 %DM			Protein	g/d	%CP	%DM
Nonfiber CHO	40.09 %DM			RDP	599.50	55.63	9.56
Sugars	3.61 %DM			RUP	478.15	44.37	7.63
Starch	27.70 %DM			RDP:RUP	1.25		
NDF	32.67 %DM			Ruminal N balance	26.64 g N/d		
Lignin	3.62 %DM			Ruminal N balance	38.46 % of req.		
peNDF	15.58 %DM			TDN allowable MCP	0.43 kg/d		
Ruminal pH	6.05			RDP balance	0.17 kg/d		
Source of Metabolizable Protein				RDP allowable MCP	0.43 kg/d		
Bacteria	44.3%	277.11 g/d		Methane Production			
Feed	55.7%	348.60 g/d		6.179 % GE		1.67 Mcal/d	
Total	625.71 g/d			7.85 mol/d		20.02 g/kg DM	
				As-fed		Dry matter	
#	ID	Feed		kg/d	%	kg/d	%
1	5	Alfalfa hay		0.5	3.9%	0.435	6.9%
2	6	Alfalfa haylage		3.9	30.4%	1.601	25.5%
3	50	Corn silage		5.8	45.3%	1.918	30.6%
4	45	Corn grain		1.2	9.4%	1.047	16.7%
5	10	Barley grain		0.6	4.7%	0.538	8.6%
6	136	Soybean meal, heated		0.8	6.2%	0.718	11.5%
7	804	Calcium carbonate		0.011	0.1%	0.011	0.2%
8	813	Dicalcium phosphate		0.003	0.0%	0.003	0.0%
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Total				12.814	100.0%	6.271	100.0%

Table O1. Summary			<i>Type: Growing/Finishing</i>			<i>Solution: 1:= Empirical</i>	
SBW:	456 kg	Breed:	Breed: Angus				
MBW:	950 kg	Sex:	Bull	BCS:	5	Age:	12 mo
Metabolizable Energy (ME)			Metabolizable Protein (MP)				
	Available	Required	Balance	Available	Required	Balance	
	Mcal/d	Mcal/d	Mcal/d	g/d	g/d	g/d	
Diet	26.6	26.6	0.0	831.76	830.19	1.57	
Maintenance	26.6	13.5	13.1	831.76	374.98	456.78	
Pregnancy	13.1	0.0	13.1	456.78	0.00	456.78	
Lactation	13.1	0.0	13.1	456.78	0.00	456.78	
Growth	13.1	13.1	0.0	456.78	455.21	1.57	
Reserves	0.0	0.0	0.0	1.57	0.00	1.57	
ME allowable gain	1.558 kg/d			DMI actual	10.28 kg/d		
MP allowable gain	1.564 kg/d			DMI predicted	10.38 kg/d		
				Cost per day	0.00 \$/d		
				Cost per product			
Diet Characteristics				TDN	71.55 % DM		
Dry matter	44.69 %AF			ME	2.587 Mcal/kg		
Forage	49.10 %DM			NEma	1.675 Mcal/kg		
Crude protein	12.79 %DM			NEga	1.060 Mcal/kg		
Fat	2.99 %DM			1st limiting AA: HIS	-16.31 % of req.		
Ash	5.81 %DM			2nd limiting AA: MET	-10.95 % of req.		
Carbohydrate (CHO)	78.42 %DM			Protein	g/d	%CP	%DM
Nonfiber CHO	44.61 %DM			RDP	758.29	57.70	7.38
Sugars	3.89 %DM			RUP	555.94	42.30	5.41
Starch	33.24 %DM			RDP:RUP	1.36		
NDF	33.81 %DM			Ruminal N balance	12.11 g N/d		
Lignin	3.55 %DM			Ruminal N balance	11.09 % of req.		
peNDF	18.00 %DM			TDN allowable MCP	0.68 kg/d		
Ruminal pH	6.14			RDP balance	0.08 kg/d		
Source of Metabolizable Protein				RDP allowable MCP	0.68 kg/d		
Bacteria	52.5%	436.88 g/d		Methane Production			
Feed	47.5%	394.88 g/d		5.979 % GE		2.62 Mcal/d	
Total	831.76 g/d			12.30 mol/d		19.14 g/kg DM	
				As-fed		Dry matter	
#	ID	Feed		kg/d	%	kg/d	%
1	5	Alfalfa hay		0.5	2.2%	0.435	4.2%
2	6	Alfalfa haylage		6.0	26.1%	2.462	24.0%
3	50	Corn silage		13.0	56.5%	4.299	41.8%
4	45	Corn grain		2.3	10.0%	2.006	19.5%
5	10	Barley grain		1.0	4.3%	0.897	8.7%
6	136	Soybean meal, heated		0.2	0.9%	0.18	1.7%
7	804	Calcium carbonate					
8	813	Dicalcium phosphate					
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Total				23.000	100.0%	10.279	100.0%