A total of 21 Najdi male lambs were used to evaluate inclusion of discarded dates in lambs’ diets. Experimental diets are presented in two levels 15 and 30% to replace commercial concentrate mixture. The results showed that daily feed intake was significantly (p<0.05) higher in 30% group than control group. Feed conversion ratio did not differ significantly (p>0.05) between the treatment groups. The highest averages of daily gain and final weight were attained by 30% group which is significantly (p<0.05) higher than that of the control group followed by the 15% group that is not differ significantly (p>0.05) from both other groups. Carcass components showed no significant differences between the treatments except for liver and lungs and trachea. The results revealed that feeding lamb on 30% discarded date was associated with improving meat quality traits as juiciness, flavor and general acceptability.