Abstract: The effect of choline chloride (CC) were evaluated on fruit quality of ‘Monroe’ peach over 2-year period in a commercial orchard. Spray treatments of CC (0, 1000, 2000 and 3000 ppm) were applied to 7, 21 and 30 days before commercial harvest (DBH). Some fruit quality parameters fruit weight (g), fruit flesh firmness (N), soluble solids content (SSC, %), titratable acidity (TA, %), fruit colour (CIELab), sugars, ethylene production, respiration rate were assessed per treatments. All treatments were increased fruit size and fruit weight. In the applications of CC the most determined results have occurred on colourness which is the one of significant quality parameter in peaches and they had a positive effect on the development red colour. Treatments of CC have been increased of total sugar contents.