

## عنوان مقاله:

Helianthus Annuus Seed Hydro-Alcoholic Extract Chemical Composition and Effects on Body Weight and Blood Parameters among Iraqi Patients Suffering from Type ۲ Diabetes Mellitus

## محل انتشار:

مجله علوم پیشرفته زیست پزشکی، دوره 12، شماره 2 (سال: 1401)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

سعید علی نورالهدی - *Biology Department, College of Science, Mustansiriyah University, Baghdad, Iraq*

اسرا حسین حمزه - *Biology Department, College of Science, Mustansiriyah University, Baghdad, Iraq*

عبدالمجید قاسمیان - *Noncommunicable Diseases Research Center, Fasa University of Medical Sciences, Fasa, Iran*

## خلاصه مقاله:

**Background & Objectives:** The purpose of the present study was to calibrate and analyze the effects of *Helianthus annuus* (*H. annuus*) seeds extract on body weight and blood parameters of type-۲ diabetic-mellitus (T۲DM) patients. **Materials & Methods:** Three-hundred cases of T۲DM patients were involved in this study including ۱۸۰ males and ۱۲۰ females and divided into two groups (each with ۱۵۰ members). The herbal extract of *H. annuus* with a concentration of ۵۰۰mg/kg was subjected to group ۱ (case population), but group ۲ received normal diet for three months. Gas Chromatography mass spectrometry (GC/MS) was used to analyze *H. annuus* compounds. **Results:** Major *H. annuus* fraction included chlorogenic acid (CGA) being ۴۰%. The extract conferred significant decreasing effects on hypertension but not body weight and body mass index (BMI) values. The extract receiving group vs control group regarding the mean blood factors respectively included fast blood glucose (FBS) (۳۹.۲% vs ۳.۲۲%,  $p < ۰.۰۰۰۱$ ), cholesterol (۶.۹% vs ۳.۲۲%,  $p = ۰.۰۲۳۷$ ), triglyceride (۵.۴% vs ۲.۳۰,  $p = ۰.۰۱۱۳$ ), and increase in high-density lipoprotein (HDL) (۲۲.۳% vs ۵.۲۶%,  $p < ۰.۰۰۱$ ) and low-density lipoprotein (LDL) (۱% vs ۲.۶%,  $p = ۰.۰۱۱۲$ ). **Conclusion:** *H. annuus* major compounds included CGA (۴۰%) contributed to the control of the hypertension, lipid profile and the blood factors among T۲DM patients compared to those patients who received normal diet. More detailed investigations by participation of higher number of patients are required in this regard.

## کلمات کلیدی:

*Helianthus-annuus*, Diabetes Mellitus type ۲, blood factors

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1702267>

