



## INTISARI

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**Latar belakang :** Diabetes Melitus tipe 2 (DMT2) merupakan penyakit kronis yang prevalensinya meningkat setiap tahun hampir di setiap negara di dunia termasuk di Indonesia. DMT2 banyak diawali dari kejadian prediabetes yang banyak menyerang wanita pada usia produktif. Prediabetes ditandai dengan terganggunya kadar glukosa darah puasa (GPT) dan atau toleransi glukosa (TGT). Ada korelasi positif antara konsumsi antioksidan dan pembatasan konsumsi gula dengan pencegahan prediabetes maupun DMT2. Salah satu minuman yang memenuhi kriteria tersebut adalah teh rosela-stevia.

**Tujuan :** Mengetahui pengaruh pemberian teh rosela-stevia terhadap penurunan kadar glukosa darah puasa dan kadar glukosa darah 2 jam post prandial pada wanita prediabetes.

**Metode :** Kuasi eksperimental dengan 1 kelompok perlakuan dan 1 kelompok kontrol. Tiap kelompok terdiri dari masing-masing 12 subjek penelitian berusia 30-60 tahun yang mengalami prediabetes. Kelompok perlakuan di berikan teh rosela-stevia 2 kali sehari selama 14 hari. Pelaksanaan penelitian mulai bulan 1 November 2015 – 30 Februari 2016 di Kelurahan Maguwoharjo Yogyakarta. Analisis untuk mengetahui pengaruh pemberian teh rosela-stevia digunakan paired ttest (sebelum dan sesudah perlakuan) dan ttest (kontrol dan perlakuan).

**Hasil :** Pemberian teh rosela-stevia dapat menurunkan kadar glukosa darah puasa (GDP) secara signifikan ( $p<0,01$ ) namun tidak dapat menurunkan glukosa darah 2 Jam PP (GD 2 Jam PP) secara signifikan ( $p>0,05$ ).

**Kesimpulan :** Teh rosela-stevia dapat menurunkan kadar GDP pada wanita prediabetes di Maguwoharjo Yogyakarta tetapi tidak pada kadar GD 2 Jam PP.

**Kata kunci :** prediabetes, teh rosela-stevia, kadar GDP, dan kadar glukosa 2 Jam PP.

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## ABSTRACT

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**Background :** Diabetes mellitus type 2 (DMT2) is a chronic, lifelong condition which prevalence has steadily increased across the globe, including Indonesia. DMT2 begins with pre-diabetic condition experienced by women in their productive age. The impaired fasting glucose level (IFG) and those with impaired glucose tolerance level (IGT) are two main symptoms of pre-diabetic condition. Antioxidant intake and glucose limitations are positively correlated with pre-diabetes and DMT2 prevention. Rosella-stevia tea is one of alternative remedies which satisfies these two conditions.

**Objective:** To test the effect of rosella-stevia tea on fasting blood glucose level (FBG) and 2 hours post prandial blood glucose level (2-hour PP BG) on women with pre-diabetic condition.

**Method :** Quasi-experimental study with control and treatment group. Each group consists of twelve subjects aged 30 – 60 years old women with pre-diabetic condition. The treatment group is given Rosella-stevia tea twice a day for 14 days in a row. The study was conducted from 1 November 2015 until 30 February 2016 in Maguwoharjo District Yogyakarta. T-test (before and after) and independent test (control and treatment) are used to detect the effect of the treatment.

**Result :** Rosella-stevia tea consumption could significantly reduce FBG level at 1 percent significant level, but has no significant effect on 2-hour PP BG at 5 percent significant level.

**Conclusion :** Rosella-stevia tea could reduce FBG level on pre-diabetic women in Maguwoharjo Yogyakarta but has no effect on two-hour PP.

**Key word :** prediabetes, rosella-stevia tea, FBG level, and 2-hour PP BG level.

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